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COMMERCIAL REVIEW

OF THE

SOUTH AND WEST.

CONDUCTED BY

J. D. B. DE BOW,

PROFESSOR OF POLITICAL ECONOMY, COMMERCE AND STATISTICS IN THE
UNIVERSITY OF LOUISIANA, NEW ORLEANS.

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OF THE

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THE

COMMERCIAL REVIEW.

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Art. I.—FLORIDA.

THE adventures of Narvaez and the romantic wanderings of Ponce de Leon and De Soto, in search of the perpetual spring and the fabled mines of gold; the buccaneering of the English; the wars waged with Oglethorpe by the Spaniards; and more recently its long and bloody Indian wars, have given to Florida a greater historical interest than attaches to any other portion of our country. But as one of the youngest sisters of our confederacy, but little is known of her topography, resources and productions. Peninsulated from almost all intercourse with other States, she lies out of the great thoroughfare of travel, and while the commerce of the great West sweeps around her shores, they are looked upon but as so many dangerous reefs and rocks, threatening destruction to the mariner. It is our aim, in the following article, to give some idea of the present actual state and condition of Florida.

The peculiar outline of its coast has probably rendered its general shape and position familiar to every one—having been somewhat aptly compared to a reversed boot. It extends at right angles some five hundred miles west and south, and has a length, in its greatest extension, of nearly one thousand miles (?)

The southern portion of the Peninsula is covered with a large sheet of water, called the Everglades, of immense extent, filled with islands, and which, it is supposed, may be rendered available by drainage. The central portion of the Peninsula is somewhat elevated, the highest point being about 171 feet above the ocean, and gradually declining towards the coast on each side. The portion of the State between the Suwanee and the Chattahoochie rivers, is elevated and hilly; the western portion of the State is level. The St. Johns river, of magnificent dimensions, runs from south to north upon the eastern side of the Peninsula, and debouches near the northeast boundary of the State; and the Suwanee runs a nearly parallel course on the western side of the Peninsula, from north to south.

The first settlement of Florida *was made* at St. Augustine, in the year 1564—*it being, by forty years,* the oldest settlement in the *United States. Pensacola was settled* in the year 1696.

The archives of the country during the period of the Spanish rule. prior to 1768, having been removed, it is difficult now to judge to what extent the country was settled previous to its cession to Great Britain. Remains of ancient settlements are found to a considerable extent between the Suwance and Chattahoochie rivers; the traces of old roads, fortifications, &c., are very distinct; and gun barrels, pottery, ship spikes, &c., are found; but the public opinion of the country is rather inclined to the supposition that these settlements were made by buccaneers, who, about 1660, swarmed in the southern seas; and the quantity of ship spikes, &c., found, seem to render this opinion highly probable.

It is presumable, therefore, from the known inertness of the Spanish character, and the slight progress made by them in the settlement of new countries, that their settlement of Florida was very limited in extent, and that with the exception of establishing a few mission houses, they never ventured far from the coast, and paid but little attention to the tillage of the soil.

In 1763, the Floridas were ceded by Spain to the British crown. The Spanish inhabitants principally left the country, and it soon began to prosper under the energetic impulse communicated by the Anglo-Saxon race. Efforts at settlement on a large scale were immediately undertaken. The British Government gave extensive grants of land, upon the condition of their settlement. Dr. Turnbull, in connection with some distinguished gentlemen in England, laid the foundation of an extensive colony at New Smyrna, and brought from the islands and shores of the Mediterranean some 1500 families. Lord Rolle, Gov. Moultrie, Earl of Beresford and others, established settlements; and upon the breaking out of the American Revolution, large numbers of loyalists came into the country from Georgia and Carolina.

The exports of Florida in 1780, reached 40,000 barrels of naval stores. One of the principal articles of cultivation seems to have been Indigo; and it is said that the indigo of Florida brought the highest price in the London market.

The British possession of the country continued but twenty years: but during that period more was effected in settling and improving the country, than in its two hundred years of occupation by the Spaniards.

But unfortunately for Florida, in 1783, the province was re-ceded by Great Britain to Spain; and the English population, which in 1778, in East Florida alone, numbered over 13,000, principally left the country and went to the adjoining American States. From that period to its cession to the United States in 1821—a period of about forty years—it languished and struggled along with difficulty; the cultivation of the country neglected; the English settlements having been allowed to go to ruin; and at no time during this period was the population, in both the Floridas, estimated at over 10,000—a large portion of whom lived in town, or were hangers-on of the Government.

The Spanish population, to a considerable extent, left the country upon its cession to the United States, and immigration began to flow

rapidly; but the unsurveyed state of the country, the uncertainty
land titles, most injudiciously involved in litigation by the Govern-
nt, militated against its settlement; and the fierce and turbulent
lian race, who had made it a battle ground for over two hundred
l fifty years, and who had never been conquered, and had no egress
n their peninsular home, occupied the best lands of the State,
dering it impossible to obtain them. But yet, in spite of all these
tacles, a considerable population planted themselves in the country.
e Territory was just beginning to reap the fruits of its American
upation, when the desolating Indian war broke out in 1835, and
tinued for seven long years—rendering all habitations out of the
its of the occupied parts insecure, and destroying all the improve-
nts which had been undertaken. In 1842 this war terminated—
l the Seminoles, after a struggle of nearly 300 years, were forced
yield to their destiny, and were nearly all transferred beyond the
ississippi.

Thus the population of Florida had, up to 1842, undergone four
tire revolutions; and after having been settled by the European
ce for two hundred and eighty years, was forced to begin anew the
ttlement of the country—a series of disasters unparalleled in the
story of America.

Since 1842, the actual settlement of the country has commenced,
d progressed with reasonable rapidity, the present population being
robably about one hundred thousand.

The health of Florida will very favorably compare with any other
ortion of the Union—having no diseases except slight fevers, and
at concomitant of all new countries, fever and ague. The ratio of
ortality is believed to be unusually small; while many instances of
reat longevity are presented.

The lands of Florida are almost *sui generis*, and are very curiously
istributed, and may be designated as High Hammock, Low Ham-
ock. Swamp, Savanna, and the different qualities of pine land.

High Hammock is usually timbered with live oak and other spe-
ies of oak, magnolia, laurel, &c., and is considered the best descrip-
ion of land for general purposes. *Low Hammock*, timbered with
ive oak, water oak, and subject to overflow—usually needing drainage.
ut when drained, preferred for sugar. Of this description of land,
equiring more or less drainage, large bodies exist in the State. *Sa-
anna*, on the margin of streams and frequently in detached bodies—
sually very rich alluviums, and susceptible of being cultivated in dry
asons, and yielding largely: ditching and dyking would render
uch of it available. *Marsh Savannas*, upon the borders of tide
treams, when reclaimed are very valuable for rice or cane—some
nd of this description, upon the Tomaka, having yielded above three
ogsheads of sugar to the acre. First class pine lands are generally
referred by small planters to any other, and they have been found
roductive and valuable. Indeed, it is believed that the pine lands
f Florida are superior to any pine lands in the South for their
ertility, yielding good crops in their natural state, and when trodden
y cattle, becoming equal *to rich hammock* land. I have seen, thus
rly in the *season, cane having above twenty* joints and well matured,

grown upon Florida pine lands: and the sugar made from such lands is generally of superior quality. The hammock lands, when cleared, make excellent crops at all seasons.

The chief staple of Florida, at present, is Cotton—the region west of the Suwanee cultivating the Upland, and the eastern portion of the State producing Sea Island, of a quality bringing from 20 to 30 cents per pound the last season, the coast usually producing the first quality.

The Sugar Cane will, however, in a few years, become the staple of the Peninsula, which, from its climate, soil and facilities, is peculiarly adapted for its cultivation. It is now cultivated for home consumption by almost every planter, small and great; but the expense of machinery, and the time required to get under way, has deterred many from abandoning their cotton to raise cane.

Previous to the Indian war, a large number of sugar plantations had been established on the eastern coast of Florida, upon the Halifax, Matanzas, Tomoka and Hillsborough rivers, where the lands are principally the heaviest live oak hammock, and by their advantageous situation upon navigable streams, are very suitable for cane. The cultivation was carried on successfully; and had not the Indian war desolated the country and entirely broken up these establishments, the sugar crop of Florida would now have been a large one. The interior of the Peninsula is well adapted to the cane, as is, indeed, the whole Peninsula extending southward from lat. 30 to lat 23; Florida approaching most nearly to the temperature of Cuba of any part of the South. Lands suitable for the cultivation of sugar, may be purchased at the present time at very low prices, from the Government price of $1 25, to $5 and $10 per acre, in private hands, according to their situation. Even the old plantations, with their improvements, may now be bought at from $5 to $10 per acre; but as the country becomes settled, of course lands will rise in value

Cattle are among the most productive sources of income to the Floridian. The vast ranges of unoccupied land give the greatest abundance of perpetual verdure and green pasture, and they double in three years, and may now be purchased in any quantity at $5 per head. Swine are equally profitable, requiring little care or attention Horses and mules are also raised, without care or expense.

Tar and Turpentine, which were in British times extensive articles
export, have been neglected for a long period; but the profitabl
rations of North Carolina have recently awakened renewed atten
to this branch of manufacture, and shipments made from the St
's last season, it is said, have proved profitable.

has also been neglected, as a staple, since the days of Britis
on, when it was raised to a considerable extent. The land
or its cultivation are abundant along our rivers and streams
our population is sufficiently dense to develop all ou
will, no doubt, be one of the most important branches o

rs and Turtle abound in the greatest profusion, and th
rket receives a large portion of its supplies from th

The Oak, Cedar and Pine of Florida are becoming valuable for shipment. The Navy yards have drawn their supplies of Live Oak, for many years, from our forests; and the diminution and high prices of pine lumber at the North, are bringing our Yellow Pine into great demand, and its shipment is rapidly increasing.

Among the various miscellaneous articles which have been found well adapted to the country, may be mentioned the Orange, Lemon, Banana, Olive, Hemp, Palma Christi, Benne, Arrow Root, Cassava, Indigo, &c.

Take it all in all, Florida, at the present time, affords as good an opening to the Southern planter desirous of changing his location, as any portion of the Union: and indeed our partiality would lead us to say that, taking into view its splendid climate, tropical latitude, facility of water communication, the fertility of its soil and the low price of its lands, that it affords stronger inducements to the prospective settler, than any other portion of the South, and that capital and enterprise will make it a great State.

Art. II.—MANUFACTURING ADVANTAGES OF THE LOWER OHIO.

If, as is conjectured by some, the recent extensive failures in Great Britain have been chiefly confined to the manufacturers of cotton, and to those who as merchants, factors and bankers, have been connected in some shape with the cotton trade, it is very clear that they cannot bear up against American competition any longer. If the high price of provisions during the last year has affected the price of labor in their factories—which does not appear from any thing we have seen; still, their remoteness from the raw material must far more than countervail any advantages they can ever have over us on the score of cheap labor, or the perfection of their machinery. Indeed, under the late improvements in machinery, the cost of manufacturing in this country has been greatly reduced; added to this the comparative cheapness of living, and, above all, the price of the raw material—having, as the English manufacturers do, three thousand miles of ocean transportation—it is impossible that they can ever again compete with us in this branch of industry. Under all the changes of our tariff laws, our manufactories have been steadily increasing, until they have acquired a solidity which no legislation can possibly shake.

But is the manufacture of cotton to be confined chiefly to the rugged hills of New England? To the minds of some of us, the day is coming when the valley of the Ohio will, so far as this great interest is concerned, bear the same relation to New England, that New England now does to Great Britain. It is now settled incontestibly, that steam power, where coal is cheap, is cheaper than the cheapest water power for propelling machinery. This, then, is our position in the West. The great Illinois coal field touches and crosses the Ohio river, say 100 miles below *Louisville*. *There*, on either the Kentucky or Indiana *side, for one hundred miles*, may be found large quantities *of the finest coal for steam purposes*, which may be had at the *banks for four to five cents* per bushel. In New England where steam power is used—and that is the case in many of the most extensive and recently erected factories—the cost of coal is, on an average, full 20 cents per bushel; making a difference in our favor, in this single important item, of full three hundred per cent. Here on the Ohio river we are within ear-shot of the cotton-fields of Tennessee, Alabama, Mississippi and Arkansas—on a river navigable at all seasons of the year—where provisions are, and always will be, cheaper than in any other part of the United States—in a perfectly healthy position, and as far south as is compatible with this important consideration. Add to this that we are in the centre of the great Mississippi Valley, where our market for the manufactured article is known to be the best in this country. With these manifest advantages over New England, why should we go there for our manufactured cottons? Or, rather, why should we not avail ourselves of our superior position and resources, and supply the markets of the world with cotton fabrics? Nor must it be overlooked that, for the manufacture of *iron* and *hemp* we possess the same natural advantages, viz: the *raw material and the moving power*.

Allow me to make another suggestion for the consideration of the South. It is certain that, at no distant day, a railroad communication will be established between the Northern Atlantic cities and the navigable waters of the West. This noble scheme of internal communication will connect the whole great Valley of the Mississippi with the Southern Atlantic sea-board; and when that is accomplished, it requires no prophet to foresee that the commanding ascendancy of the Northern cities in the business of foreign importations and internal commerce, must be greatly impaired. It is impossible to estimate the effect which the opening of such a direct communication will have upon all the relations of the South and West. Is it not then, in the present and prospective condition of the cotton trade and of cotton manufactures, also clearly the policy of the South t foster the establishment of manufactories of otton, iron and hem on the tributaries of the Mississippi? Not by the enactment of T riff laws for protection—for Nature has given all the protectic necessary—but by the investment of a portion of her surplus capit in these enterprises, whereby she will enlarge her market at home f the product of her cotton fields, and, in time, link indissolubly t gether those great interests of cotton production and cotton man facture? Connected as we are by an immense extent of navigab rivers which flow into the Gulf of Mexico, our geographical affiniti are all-powerful: and if, superadded to these, our interests are co bined by the system of policy to which I have alluded, no agitatio growing out of Southern institutions can ever disturb this power sympathy. The Western free States, in the angry controversies b tween the North and the South, so much to be deplored, occu *neutral ground;* but Nature, by those powerful arteries of commerc our noble rivers, and by those immense coal fields which lie along t southern boundaries of the free States of Indiana and Illinois, a which, with the cotton of the South, constitute the *pabulum* of t most important manufacturing interests of the country, must forev *with preponderating* force, throw the West and the South together.

INDIANA

Art. III—PUBLIC LANDS ACQUIRED BY TREATY, ETC.

PROCEEDINGS BY THE AUTHORITIES OF THE UNITED STATES FOR ASCERTAINING AND ADJUDICATING LAND TITLES, AND CLAIMS TO LAND, WITHIN THE FORMER POSSESSIONS OF GREAT BRITAIN, FRANCE AND SPAIN, SUBSEQUENT TO THEIR OCCUPATION BY THE UNITED STATES.

The adjudication of claims to lands lying within territories conquered or purchased from a foreign power, is ever one of the most perplexing and difficult matters that can be brought before the Judiciary of a country. Our own experience has been quite sufficient upon this point, to go no further. We have thought it an appropriate subject for an article in our Review, and are delighted that our able friend, Dr. Monette, of Mississippi, has consented to prepare it in the elaborate manner now presented to the reader. Henceforward there will arise other questions, and difficulties of a like nature, should there be any acquisitions of land growing out of the Mexican war—and we ought in some sort to be prepared in advance for their discussion. Ed. Com. Rev.

The first portion of the Western territory acquired by the United States from Great Britain, which called for the interposition of Congress for the adjustment of land claims growing out of foreign jurisdiction, was that of the *Natchez District of West Florida.*

The surrender of this country by his Catholic Majesty, left the inhabitants embarrassed by conflicting private land claims derived from different Governments, while it was not free from conflicting claims as to the State sovereignty itself. Although the country had been organized into the Mississippi Territory, the State of Georgia claimed the sovereignty of all the territory north of the 31st degree of latitude, westward to the Mississippi; and it was not until the 24th of April, 1802, that the State of Georgia, by the "Articles of Agreement and Cession," relinquished her claim to the United States, in consideration of one million, two hundred and fifty thousand dollars. The United States subsequently proceeded to adjudicate private claims emanating from either English, Spanish or Georgia concessions duly made prior to 27th October, 1795, the date of the Treaty of Madrid, which provided for its surrender to the United States.

The first provision by Congress was *An act regulating grants of land, and providing for the disposal of the lands of the United States south of the State of Tennessee;* approved March 3d, 1803.

This act provided for two Boards of Commissioners, attached to two Land Districts, with authority to examine and adjudicate all private land claims emanating from either of the Governments above enumerated, agreeably to the laws, customs and usages of the same.

The *first* section of the act provided that all *heads of families* actually resident in the country, holding claims in virtue either of complete grants, or orders of survey, emanating from the English, Spanish or Georgia Governments prior to October 27, 1795, for land to which the Indian title had been extinguished, should be *confirmed in their several titles.*

The *second* section provided for *settlement rights* to those actual inhabitants who were without such titles; granting to every person twenty-one years of *age, who actually* inhabited and cultivated any lands *on the 30th day of March, 1797*—the day on which the Spanish *troops finally evacuated this portion* of the country—a tract of land *eeding 640 acres, to include* their improvement.

The *third* section provided a *pre-emption right* to all persons, twenty years of age, who occupied and cultivated lands, (not secured by either of the first or second section) on the 3rd of March, 1803, the date of the passage of said act.

The period allowed for the presentation of claims was limited to the 31st of March, 1804, but was subsequently extended by Congress.

The Board of Commissioners for the District west of Pearl river, consisted of Thomas Rodney and Robert Williams, commissioners, and Edward Turner, Recorder. This Board convened in the town of Washington, Adams county, and continued to receive and adjudicate claims until the 3d of July, 1807, when it adjourned finally, having adjudicated no less than *two thousand and ninety claims*, besides a number of British grants which were not acted upon by the Board, and which were held as conflicting claims to lands in the Natchez District, until finally adjudicated by the Federal Court, in 1824. (1)

The Board for the District east of Pearl river convened at Fort Stoddart, on the Mobile river, on the 2d of February, 1804, and consisted of Ephraim Kirby and Robert Carter Nicholas, commissioners, and Robert Chambers, Recorder. This Board continued its sessions until September 21, 1805, when it finally adjourned, having adjudicated *two hundred and seventy-six claims.*

The subsequent disposition of lands in the Mississippi Territory, was regulated by laws of Congress, through the General Land Office and the District Offices, and claimants were quieted in their titles until the year 1824—when the holders of certain British patents, through their agent, Seth Hunt, instituted suit in the District Federal Court at Natchez, in order to test the validity of the British patents issued by the Governor of West Florida, north of the original southern limit of Georgia. The Court decreed such grants null and void; and the question of title in the Natchez District became settled forever as regards foreign grants. (2)

II. IN THE ILLINOIS COUNTRY.

The Illinois country, prior to its occupancy by the United States, had been successively under the dominion of France and Great Britain; and each power had exercised civil and military jurisdiction over a few dependant settlements, sparsely distributed over a wide extent of country, lying chiefly on the east bank of the Upper Mississippi and its immediate tributaries. These isolated settlements comprised the residence of the early French colonies, which first penetrated the Illinois country from Canada, and subsequently established the dominion of France on the Upper Mississippi. Deserted by their associates and countrymen, who still adhered to the cause of France, they reluctantly submitted to the dominion of Great Britain, quietly resigning themselves to the fate of war. But scarcely had the English authority been established over them, and their fears of foreign domination dispelled, when a new enemy assailed them, and the fate of war again placed them at variance with their English masters. Hence, before they had in any measure lost their national traits and customs, or had in any wise adopted those of their English conquerors, they found themselves nominally and in fact, citizens of the United States—released from the military domination of British authorities, but under the jurisdiction of the State of Virginia. A few years more brought another political change, and they found themselves under the exclusive jurisdiction of the Federal Government, and associated with the rude, active, enterprising pioneer of the West, pressing forward into all the remote settlements, in quest of Indian traffic and land speculation.

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(1) Records of Land Office at Washington, Miss.

(2) Wheaton's Reports, pp. 523 to 530. Also, Walker's Reports of the Supreme Court of Mississippi, pp. 52, 53, &c. Also, American State papers, *Public Lands.*

In regard to their land titles, the original French inhabitants of the counties of Knox and St. Clair, from 1790 to 1800, were peculiarly situated. The greater number of them holding claims and imperfect titles to lands, derived either from the French or English authorities prior to the treaty of 1783, or based upon acts of Congress and the laws of Virginia subsequently, it became a matter of deep interest that the validity of their claims and titles should be settled by the proper authorities, so that they might be quieted in their respective claims. For this purpose two acts of Congress were passed, in the year 1783—one approved on the 20th of June, and the other on the 28th of August, both designed for their relief. The *first* authorized the Governor of the Northwestern Territory to examine and *confirm temporarily* all claims and titles legally derived from the French, English or American authorities. The *second* provided for the "allowance of *settlement rights* of 400 acres to all such as had, on or before the close of the year 1783, acknowledged and professed themselves citizens of the United States, or either of them."

Although situated five or six hundred miles from the seat of the Territorial Government, numerous applicants filed their claims with the Governor for examination and confirmation, as coming within the provisions contemplated by the acts of Congress. Although unskilled in many of the pre-requisites for a profound investigation of these claims, Governor St. Clair did not hesitate in the exercise of his prerogative, by a summary adjudication in favor of numerous claims in the hands of speculators and land-jobbers, and which were subsequently adjudged to be spurious. In many cases, not fully comprehending the subordinate nature of his powers, he proceeded in an irregular manner with his adjudications, greatly prejudicing the interests of the Government, and promoting the improper views of designing men. (3) Yet he persisted in the exercise of his prerogative in these adjudications, in the county of Wayne, and within the Indiana Territory, even after his jurisdiction was confined to the present boundary of Ohio. During this period, claims of every shade and character were admitted and confirmed in such numbers, and a majority of them with so little claim to law and justice, that the greater portion of his decisions were unceremoneously reversed by the Board of Land Commissioners ten years afterward.

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(3) *American State Papers—Public Lands.* Vol. II, pp. 163 and 114.

Among the confirmations of Governor St. Clair, was the alleged grant of John Wilkins, British commandant of the Illinois country, dated April 22, 1769, made in favor of John Baynton, Samuel Wharton and George Morgan, for 13,980 acres, and confirmed by the Governor's patent, dated August 12, 1800. This claim, when thus confirmed, was the joint property of John Edgar and John Murray St. Clair, son of the Governor, and covered some of the finest lands in the vicinity of Prairie du Rocher, northwest of Kaskaskia. Relative to this claim, the Board of Commissioners, in 1810, reported against its confirmation, observing, "that under the circumstances, if this instrument is to be taken as *a Governor's patent*, and if this Board be possessed of authority to express an opinion on this subject, they do not hesitate to express it: *that the Governor has transcended his powers; that the grant has been improperly obtained, and is of no validity.*" (4)

During the French dominion, comparatively few grants of land were made to individuals beyond the limits of the village concessions; and many of these were abandoned on the change of Government. The English Government, during their brief command, were vested with authority to make the ordinary grants to actual settlers, and to a certain class of meritorious soldiers and officers, designated in the noted proclamation of October 7, 1763. So far as the English commandants in the Illinois country were governed in their grants or concessions by the laws and regulations provided for the Provincial Governments, their grants and concessions were good and valid—but no further.

Under the jurisdiction of Virginia, no commandant had authority to grant or appropriate public lands to the use and benefit of individuals, otherwise than was provided by law, for military service in defence of the country. Warrants for the occupancy of wild lands in Virginia were confined exclusively to location within the regular State boundary.

Subsequent to the extension of the Federal Government over the Northwestern Territory, bounties of land for military service were allowed by acts of Congress for such as served in the local militia, for the defence of the settlements against Indian hostility.

Such were the grounds for land claims in the Illinois and Wabash countries; and such was the extent and material presented to land jobbers and speculators, for the exercise of their peculiar faculties in securing large bodies of the finest lands in this portion of the Indiana and Illinois Territories. Nor could it reasonably be expected that Governor St. Clair, engaged with the multifarious duties of his office, should have been able, in the adjudication of the numerous claims submitted for his decision, to scrutinize all the possible sources of fraud so intimately blended in the majority of them, or that he should have acquired an intimate knowledge of the former laws, usages and customs, which regulated the official acts of the English or French authorities, or of the laws of Virginia and of Congress, which might bear upon such claims. Hence it is not a matter of surprise, that the numerous claims presented, he should have allowed and ed a large proportion which were fraudulent in their nature eption, urged and supported as they were by wealthy traders eculators, and sustained by their subordinates, as unscrupulous iselves. Yet the facility with which confirmation of land titles tained from Gov. St. Clair was such, that speculators and land became emboldened in their attempts to establish other which were fraudulent in their inception, and without shadow dation in law or justice; claims which originated in forgery, re supported by perjury and every species of corruption.

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(4) *American State Papers—Public Lands.* Vol. II, p. 208.

oncessions or incipient grants of land by the French authori- or to the peace of 1763, had been made to a few favored indi- , who introduced emigrants under the patronage and protection lthy proprietors, deriving their grants from the crown, for the hment of colonies. In this manner were made most of the ents at Detroit, as well as at Vincennes, Kaskaskia, and other upon the Upper Mississippi and the Illinois. Large grants a this manner, subjected the proprietors to all the requisitions, orfeitures, alienations and quit-rents pertaining to the feudal of Europe. In some instances the British commandants sub- tly promised a discharge from these forfeitures, in consideration ic service and labor upon the public works, under the English on. (5)

its were but rarely made by the British commandants in the country; at least, if made, they were not in conformity with ng's proclamation of October 7, 1763, and the subsequent ordi- ; and all grants or concessions made contrary to these, were d void to all intents and purposes; as were also *purchases* made viduals or associations from the native tribes. Yet numerous grants for large bodies of land in the Illinois country and e Wabash, purporting to have been made by the several British ndants of those districts, were presented to Governor St. Clair firmation prior to the year 1800; and strange as it may appear, s the influence exerted by favorite speculators and land-jobbers e Governor, that he continued, up to the last day of his juris- over the Indiana Territory, to ratify and confirm these spurious which had already multiplied to more than *three hundred*, in ds of corrupt men and designing speculators. (2) A few sim- firmations were subsequently made by his successor, Governor on. prior to the year 1804.

s not until the year 1804, that effectual measures were taken gress, for a thorough examination and final adjudication of the us "claims to land," which were known to be in the hands of lventurers as had found their way into the remote portions of diana Territory, and especially in the District of Kaskaskia. st measure to effect this object, was the passage of an act enti- *An act making provision for the disposal of the public lands Indiana Territory, and for other purposes;*" approved March

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merican State Papers—*Public Lands*. Vol. I, p. 197, col. 1, folio ed.
idem.

26, 1804. This act provided for the regular survey of all the public lands, (to which the Indian title then was, or might thereafter be extinguished) into regular square sections of 640 acres, arranged in regular townships, each six miles square, wherein should be designated all *private claims*, or grants to land, which should be finally recognized by Congress. For the accomplishment of this obiect, the act further provided for the organization of "*a Surveyor General's Office*, and "*three District Land Offices*." The Land Offices, each with a Register and Receiver, were located at Detroit, Vincennes and Kaskaskia.

In order to ascertain the number and extent of private claims in each of these Districts, a Board of Commissioners was attached to each Land Office, with full powers to receive, examine, adjudicate and decide upon all claims presented, whether derived from French or English grants and concessions, or derived in virtue of any act of Congress. The Commissioners were authorized to confirm all complete titles and private claims to land, in virtue of any *legal* grant or concession, made by the French authorities, prior to the 10th day of February, 1763, or by the British authorities subsequently and prior to September 3d, 1783; or in virtue of any resolution or act of Congress subsequent to the treaty of 1783; provided the said claim were duly *filed and recorded* in the office of the Register of the District in which the land was situated, together with its nature, extent, and any written evidence in support of the same, on or before the first day of February, 1805.

The Commissioners attached to each Land Office were required, from and after the first day of January, 1805, to enter upon the examination and adjudication of all claims duly filed with the Register, and to report their decisions upon the same, from time to time, to Congress for *their final confirmation or rejection* of said claims. (6)

In their report of adjudicated claims, the commissioners were required to arrange them under the following classes, viz: 1st, those which were unequivocally recommended for confirmation, and for which certificates were issued to the holders; 2d, those which in equity *ought to be* confirmed; and, 3d, those which were fraudulent, and which *ought not to be* confirmed.

The claims which had formerly been confirmed temporarily by the Governors of the Northwestern and Indiana Territories, were likewise subjected to the final adjudication of the Commissioners, as other cases.

The passage of this act gave a new impulse to land-jobbers and speculators, who had possessed themselves of numerous spurious titles and fraudulent claims, for the adjudication of the Commissioners when they should enter upon the duties of their office. To carry out their purpose of securing the confirmation of their claims and factitious titles, the speculators associated themselves into a combination to resist and defeat the ends of justice, and to defraud the Government out of large bodies of public lands. At the head of this combination were adventurers who had been long in advance of the white settlements, in the capacity of Indian traders, agents and speculators,

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(6) *Land Laws of the United States*, pp. 495, 503.

in modes, forms and usages, for preparing inchoate land titles
the French, Spanish, English and American Governments re-
ely. Aided and abetted in their designs by unprincipled men
complices, they gave ample latitude to their schemes of specu-
Among them were men who did not confine their operations
o the Illinois country, but equally to Upper and Lower Louis-
nd whose trading operations extended to the whole of Lower
ina, Florida, and even to Texas. Hence it was that Major
rt, early in 1805, while Governor of Upper Louisiana, gave no-
the Federal Government that "he had become apprised of a
us combination, for the purpose of defrauding the Federal Gov-
t of immense quantities of valuable lands in the Illinois
, by means of spurious and factitious claims, contemplated by
us individuals, capitalists and traders, who had flocked to that
region. At the bottom of the conspiracy was suspected a man
name of M*******, who had been actively concerned on the
Mississippi, and who at that time commanded a post near New
s. (7)
great field of operations was Kaskaskia, the location of the
Office for the Illinois country. The commissioners for this
were Michael Jones and E. Bacchus—both men of known
s and unimpeachable integrity in the discharge of their official

commissioners entered upon the responsible duties of their
and continued in the laborious, vexatious and hazardous exer-
the same during the course of three years, when they made
nal report to the Secretary of the Treasury, on the 31st of
er, 1809: having examined and adjudicated no less than *two*
d three hundred and eighty claims!
e claims were alleged to have been derived from the following
viz:
Ancient grants, legally made by the French and English au-
s, comprising *one hundred and eleven claims*—of which *forty-*
ere confirmed, and *forty-one* rejected. (8)
Settlement rights, under the laws of Virginia, or those of Con-
ach for 400 acres, comprising *seven hundred and twenty*
Of these, *two hundred and sixty* were confirmed, and *four*
d and sixty were rejected for gross fraud and perjury.
Donations, of 400 acres and militia service, to the heads of
residing in the Illinois country at the conquest by Virginia,
ne peace of 1783, comprising *eight hundred and sixty-six*
-of which *two hundred and eighty-six* were confirmed, and
dred and eighty were rejected, for gross fraud and perjury
ly every case.
ng the claims rejected by the commissioners, were no less than
dred which had been improperly confirmed by Governor St.

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is is supposed to mean Don Francisco Morrison, Commandant of Fort
at Mobile, and a relative of the Morrisons at Kaskaskia, who traded
ly throughout the Spanish provinces, from Florida to New Mexico.

nerican State *Papers—Public Lands, vol. II,* pp. 131, 134, 138; also pp.
also 173–206.

Clair prior to 1800, and by Governor Harrison prior to 1804. these, *two hundred and ten* purported to be for militia service— *hundred and eighty* for donations, and *one hundred and ten* for t tlement rights.

In addition to the numerous confirmations for larger tracts land, the commissioners recommended for confirmation the homeste and common fields in and adjacent to the following villages, viz:.(9

In the village of	Kaskaskia and vicinity,	234 cla
" " "	Du Rocher.	50
" " "	Fort Chartres,	55
" " "	St. Philip,	60
" " "	Cahokia.	176
" " "	Prairie Dupont,	68
	Total village claim,	643

It was during their term of service that the commissioners authorized to reconsider and adjudicate the claims confirmed by ernors St. Clair and Harrison, and to report finally upon th accordance with the act of Congress approved March 3, 1807 entitled "An act confirming claims to land in the District of cennes, and for other purposes."

The *second* section of this act provided "that all claims and to land heretofore confirmed by said Governors be, and *are h confirmed*, unless when actually rejected by said commissioners. (

In the memorable frauds attempted in the District of Kask from the year 1805 to the year 1808, no man was more active or unscrupulous in the accomplishment of his purposes than John E formerly an Indian trader and land speculator. Next to him, in zeal and activity to sustain fraudulent claims by means of co witnesses, may be named Robert Reynolds, formerly an Indian tr William Morrison, Richard Lord, and William Kelley. (11). liam Morrison, as early as 1804, had been one of the most enterpr merchants and traders of Kaskaskia, and extended his operatio far as Santa Fe and Texas. (12)

John Edgar had been successful in procuring from Govern Clair the confirmation of a large number of spurious claims, incl several factitious grants for large bodies of land, in some of whic Governor became indirectly interested before confirmation. same John Edgar was the owner and claimant of more than two dred of the claims which were rejected by the Board, on accou gross fraud and perjury. Nor was his associate, William Mor more fortunate in his efforts to establish fraudulent claims by jured testimony. Those who became their willing tools, and pro ted themselves at the shrine of perjury and corruption, were Au Langlois, John Harris, Johnston Amberson, Daniel Thorn, Sol Thorn, Joseph Page, John B. Montrieuville, Simon Zoiton, Nic Revelle, J. Cook, Jno. McMutrey, and Ashur Bagley. (13)

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(9) American State Papers—*Public Lands*, vol. II, pp. 157-175.
(10) Land Laws of U. States, pp. 554, &c.—edition of 1827.
(11) American State Papers—*Public Lands*, vol. 2, p. 108.
(12) See Pike's Expedition, p. 195.
(13) American State Papers—*Public Lands*, vol. II, p. 103—col. 1.

ant only as a means of increasing the number of inhabitants, and of augmenting their resources. Hence the policy prescribed by the Spanish Government, was just such as suited the emigrant with his rising family; for he could secure land in proportion to the number of his children. Hence this species of property interested, either di rectly or indirectly, every man, woman and child in the province Hence Congress, at the earliest opportunity, adopted measures for it protection. In order to secure to the inhabitants the utmost advant ges they could have derived from a continuance of the Spanish domi ion, it was resolved to withhold from them no concesssion of lan which, under the most favorable circumstances, could have been a quired from the Spanish authorities themselves. Thus not only th *titles to land*, but the *intention* to concede it, was recognised an sustained by the authorities of the United States. And this ver favorable policy was immediately seized upon by the designing me and the pliant avarice of the Spanish authorities, who were about retire from the country. Thus aided and instructed, corrupt me soon began to devise means by which titles and concessions for lan might be multiplied for confirmation by the Federal Government. was in order to guard against such fraudulent practices, that the 14 section of the "Act erecting Louisiana into two Territories, and pr viding for the temporary government of the same," and approv March 3d, 1804, provided "that all grants for lands within the ter tories ceded by the French Republic to the United States, by t treaty of April 30th, 1803, the title whereof was at the date of t treaty of St. Ildefonso, (Oct. 1, 1800) in the Crown, Government, nation of Spain, and every act and proceeding subsequent thereto, whatsoever nature, *toward the obtaining any grant*, title or claim said lands, and under whatsoever authority transacted or pretend be, and the same is hereby declared to be, and to have been, from t beginning, null, void, and of no effect in law or equity." (16)

It was expressly declared that the object of the law was *not* to i pair any *bona fide* grant made agreeably to the laws, usages and c toms of the Spanish Government, nor to impair the claim of a *actual settler*, to lands actually granted to himself and family, nor impair any *bona fide* act or proceeding of an actual settler, tow the attainment of any lands actually settled prior to the 20th of cember, 1803, to an amount *not exceeding* one mile square; toget with such other and further quantity as heretofore hath been allow for the *wife and family* of such actual settler, agreeably to the la usages and customs of the Spanish Government."

Still further to preserve the integrity of the public domain as actually existed at the delivery of the province by Spain and Fran the same section makes it a *penal offence* for any person to mak settlement upon the *lands of the United States* within the limits Louisiana, or to *survey and mark* the boundaries of any survey, marking trees or otherwise.

Such were the precautionary measures on the part of the Unit States to prohibit designing men—speculators and their accompli

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(16) See Land Laws of U. States, pp. 509, &c.,—compilation of 1827.

by the corrupt Spanish ex-officials, who were known to be engaged in such fraudulent practices—from making and estab- factitious claims to land, by means of orders of survey, s or concessions, fraudulently made and antedated.

first provision made by Congress toward the final disposition numerous titles and claims to land, was the passage of a law l "*An act for ascertaining and adjusting the titles and to land within the Territory of Orleans and District of Louisi-* approved March 3d, 1805. (17)

first section of this act provided for the confirmation of all concessions and orders of survey, duly made by the Spanish or authorities to the *heads of families prior to the* 1*st of October*, provided they, or those claiming under them, were actually in ıpancy and cultivation of the said lands, at the aforesaid date treaty of St. Ildefonso.

second section provided for the confirmation of all claims based regular Spanish grant, concession, or order of survey, and settlement, in conformity with the laws, usages and customs of nish Government, made *prior to December* 20, 1803, to the y of one mile square for each head of a family; together with her and further quantity as heretofore hath been allowed for and family of such actual settler; provided said claimant t claim under the provisions of the first section.

third section provided for the appointment of *three* "Recorders l-titles," viz: two in the territory of Orleans, and one in the of Louisiana: the said Recorders' offices to be established vely in the city of New Orleans, for the Eastern District, and illage of Opelousas for the Western District of the Territory ans; and the third in St. Louis, for the District of Louisiana.

fourth section required all claimants to file for record in the er's office of their proper District, all titles and claims to ld by them respectively, together with any other written evi- ı support of said claims, on or before the first day of March, r the subsequent examination and adjudication of each.

fifth section provided for the organization of a Board of com- rs connected with the Recorder's Office in each District, whose should be to ascertain the *rights* of individuals and persons under the aforesaid *first* and *second* sections of the act of d, 1804. The Board of Commissioners in each District was d of two commissioners well skilled in law, in conjunction Recorder, who also acted as commissioner.

[TO BE CONCLUDED NEXT NO.]

Art. IV.—AMERICAN WINES AND VINES.

ıthor of the following letter—the second with which he has favored us eaders—is Mr. Sidney Weller, of Brinkleyville, N. C. He has been ıccessful producer, and is extensively known for his efforts to extend

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and Laws of U. *States—compilation of 1827*: pp. 518-520.

the grape culture in our country, and more especially in the South. His familiarity with the wine manufacture, too, for many years, entitles him to be heard. Mr. Weller comes out frankly and tells us that alcohol *must be used* in this process, whatever may be said to the contrary, and whatever the opposition of the Societies of the day, formed upon a basis of temperance, or of total abstinence. We are not disposed to controvert his position, nor have we sufficient facts; but there are those, doubtless, who will, if they can, for themselves: we are willing to leave the matter with them. Our object is to give all the information within our reach upon the general subject. ED. COM. REV.

IN a late communication on the Vine and Wines, for your highly valued Review, I omitted a passing notice of some things important to the complete success of the vineyard cause in our country. One was the proper soil for a vineyard. In every region of our country, native vines grow well, if the soil be not absolutely poor—and thrive well, if it be not exceedingly rich. In point of results, there is more danger of the soil being too rich than too poor. I have ever noticed that in rich garden spots and the like, qualities of vines that bear well elsewhere, will not bear at all, though of very luxuriant growth. Land that will bring good corn, is rich enough for vines. And the peculiar quality of the soil is not material to success; provided that, should it happen too much of one ingredient prevails, something of another be added; or if any one quality of soil be deficient, that it be supplied.

My vineyards (now about eight acres) extend over a diversity o soil—from the very light or sandy, to the heavy or clayey—but I hav never perceived the taste of the grapes, or the quality of the wine, t be affected by the peculiarity of soil. As an experiment with the Scuppernong, I took an old washed piece of road, in which there was littl else than clay, and planted small rooted vines 20 feet apart. Befor planting, I supplied the holes with chip manure and surface earth, i small quantities. Afterwards, as the vines grew, I scattered aroun them rotten wood and other trash from the woods. The consequenc was a fine canopy of fruitful Scuppernong vines, in flavor as good a any in my vineyards. A high and dry situation, and light soil, ar desirable for a vineyard. There should be a southern exposure—though this is less important than the foregoing. There are othe things absolutely necessary to complete success in vine culture, eve more important still. Among these may be mentioned a loose cond tion of the earth during growth, and the prevention of the vines b coming bushy. For instance, I have never known a Scuppernong bea well and mature its fruit, if neglected in these particulars; and, o the other hand, I have never known one of the bearing kind in soil not too rich, that, the above being observed, did not bear and mature its fruit well.

Vine-raising is a very simple and successful business, if as muc pains be taken *each season* for *each vine*, as for a cotton or a cor stalk. The common error is neglect during the season of growt Persons procrastinate attentions because a vine, like a cotton stock, i *not quite ruined* from the want of timely working one season. No is the vineyard an uncertain crop—like most other fruit, as the appl &c.,—only every other season abundant. I have never failed, sinc my vineyards were established, in having an abundant crop. Th esent season there were no apples or peaches, as a crop, in this region, rough late frosts, but my vineyards were in general full. I enter-ined, for entrance fees, hundreds of gentlemen and ladies as visitors, ld quantities of grapes, am on my twentieth cask of wine, and am the midst of making the Scuppernong.

It is indispensable to complete success, that *native vines* be adopted first, as well as *American modes* of culture. Foreign vines will t answer for profit, or even for fruit, in our country; neither will tive varieties that are subject to the tantalizing calamity of rotting the vine when near the time of maturity. This misfortune is as scouraging to the vintner as the *yellows* of the silk-worm to the silk-ower, in versatile southern climates. But the Scuppernong espe-ally, as well as other choice varieties, never rot—at least with me, d I presume with none—when properly attended.

There is a common complaint of American vintners that a portion their wines are apt to spoil, or turn into vinegar. From private tters and otherwise, I have reason to believe that far more failures re made inwine manufacture than are publicly confessed. There is no cessity for losing a gallon, if a sufficiency of "keeping ingredients" re used. I have lost none in five years, though making more wine, rhaps, than any vintner in the Southern States. How simple is the rocess!—

1. Mash your grapes with the machines named in my last paper, or herwise.
2. Press as in making cider.
3. Let the juice pass from the press through folds of woollen ankets.
4. Mix about a fourth, or if a strong wine be wanted, a third of od spirits, or three pounds of sugar per gallon—the doubly refined is st for a delicate wine.
5. Ton into a cask fumigated with a sulphur match, and store in a ol cellar until wanted, if even after a lapse of years.

If the wine be made with sugar, or with brandy and sugar, in some ice, it will be well (or perhaps necessary to keep from undue fer-ntation) to rack in eight or ten days—and again in same period into other fumigated cask. A fourth or third of brandy, being added, ere will be no need of further process for a good strong wine. e foreign port wine contains always a third of brandy added to it fore the voyage. This is celebrated for its medical virtues. The uppernong juice, with the same quantity of good brandy or rectified irits of any sort, has as valuable medical properties, and is much re agreeable to the palate.

If a colored wine be wanted, fermentation after the grapes are shed, must be had a few hours, or a time according to the depth of lor desired—then let the keeping ingredients be added. If I wish y Scuppernong wine a red color, I mix some Muscadines or colored uppernong grapes with the white ones, and ferment them together ter mashing, and before I press and ton the wine. If wine be not o far gone, or almost vinegar, it can be renewed or made good by ding spirits or sugar, or both, as I have tried in years past, and be-g left to stand *awhile*. *I have made wine* without any keeping ingredients, by letting the grapes hang till shrivelled or dried almost to raisins. But this will not do for a rule, or a satisfactory, profitable business. Not only was the waste of grapes thereby very great, and the wine little, but the vines were greatly injured, and in some cases almost ruined for future bearing.

After all, what is gained in point of a pure liquor? Alcohol is even then generated by the process of fermentation, and the wine is still capable of intoxication by excessive use—and therefore is just as objectionable to some in point of purity, as if the alcohol in some form had been added. Or is the objection valid that any liquor, or any thing of alcoholic principle, is impure on that account? I opine not. Alcohol is one of the purest principles in nature, or in the chemical world, and the greatest preservative of purity, or preventative of decay, in many substances. It pervades, in benevolent Providence, as a sort of preservative principle, the vegetable world. If condensed or abstracted by distillation, it is still the creature of Providence merely in a condensed form. If abused in this form—like all other pure substances in nature capable of abuse—the fault is in the abuser, and not in the thing. Where, too, is it most liable to abuse—in wine, or in the form of ardent spirits?

Since the above was put into the printers' hands we have received the following equally interesting letter from Mr. Weller:—

PROFITS OF A SCUPPERNONG VINEYARD.

J. D. B. DeBow, Esq:

There is a maxim calculated to urge on every laudable enterprise or improvement among men, which I will repeat before stating the possible profits of a Scuppernong vineyard, viz: "whatever has once been achieved may be achieved again." Now, I know that 2,000 gallons of Scuppernong wine have been made per acre; valued at one dollar a gallon, and that $500 is an ample allowance for all expenses of making the wine; leaving therefore, $,1500 of clear gain. Can this be said of any other farming business? Not only this. The cause of patriotism, or American independence of foreign lands, for wines of dubious character as to genuineness and health, is subserved at the same time. Years since, or when about to commence my vineyard business, I visited a Capt. Burlingham, living in an adjoining county, who about a dozen years previously had removed from the lower part of the State, (where the Scuppernong is a native.) and had brought some of the vines along with him. He pointed me to his beautiful little vineyard of twelve vines only, but covering with canopy about a quarter of an acre, and assured me, (he was a gentleman above suspicion of other than strict veracity.) that from that canopy he had made 500 gallons of wine, besides partaking himself and allowing his neighbors to partake abundantly of the grapes for about two months. I know of two single vines in the lower part of this State, that produce each five barrels of wine yearly. This may appear incredible to some, but it is nevertheless true; and I might relate like instances in my vineyard. Mr. Herberment, late of Columbia, S. C., related in the "American Farmer," an instance of his Madeira grape producing at rates of more than 2 000 gallons per acre.

Some cannot credit the amazing productiveness of improved husbandry as to grain crops. When I once informed a neighbor that twenty barrels and upwards of corn had been made per acre, he declared it was impossible that so much could stand upon an acre at once.—So that $1,500 clear can be made by Scuppernong vines annually per acre, may appear utterly incredible to some. But it may *appear* still more astonishing if I assert that it is possible to make four times that *sum, according to my* calculation; for last winter I sold at Raleigh, to the best

judges of wine, the Scuppernong from one to four dollars per gallon. For instan
my Scuppernong madeira, a white sugared Scuppernong wine, at three doll
per gallon, and my Scuppernong hock, a red wine, at four dollars per gall
Now, 2,000 gallons at four dollars is $8,000, and say 2,000 dollars for inciden
cost of making, and $6,000 per acre is left as clear gain—2,000 dollars, a pre
high cost. But it must be recollected, that for the Scuppernong hock I put th
pounds of doubly refined sugar per gallon, and take extra pains to make it. Nc
the sugar at fifty cents per gallon is $1,000 dollars cost, and I think another $1,(
will cover the balance of incidental cost.

True, the above enormous profit of $6,000 per acre annually, is theory mere
as on any large scale, or even as large as an acre, as far as I know; but equa
true that this theory is predicated upon facts as to a small scale: and tl
which has been done on a small scale in agriculture may be done on a large o

Yours, &c.,

SIDNEY WELLER

We regard the success of American vineyards as a matter of very great pub
interest, and are, therefore, disposed to promote it. To be successful, they shou
be sustained by a liberal patronage. A taste for American wines should, if p
sible, be induced. We are, therefore, disposed to give publication to the follo
ing closing communication of Mr. Weller, in relation to his vineyards:

BRINKLEYVILLE VINEYARDS AND NURSERIES,

A CONVENIENCE FOR THE SUOTH AND SOUTH-WEST.

Most Northern native, as well as all foreign grapes are apt to rot on the vi
in the South. So Northern raised fruit trees are found not to answer expectatic
in the South; they either do not bear well, or fail to mature their fruit. Win
apples at the North become fall apples on trees transferred to the South. Ne
twenty years experience, as well as the best information, have induced the pı
prietor of the Brinkleyville establishment, (situated in one of the Southe
States,) to declare the above, as well as to have prepared articles of sale in
line of business accordingly. He has selected what are considered the b
grapes, as well as other nursery articles, from all parts of our country; and se
at prices in no case to exceed those of any other establishment of the kind, eith
North or South. But his articles in market are prepared especially for Southe
latitudes, according to the best light of experience. For instance, of more th
one hundred and fifty kinds of grapes, bearing in his vineyards and from whic
last season, he made forty barrels of wine, besides entertaining hundreds
visitors paying entrance fees to partake of grapes, and buying quantities to car
away, rooted vines for sale of only about a dozen varieties, deemed good in eve
respect. And of these, by far the most well rooted vines of the *Scuppernon*
which are considered decidedly the best grape in our country, if not in t
world. South of latitude about 37 1-2. The above "*rooted*" plants are the on
kind, in common with all the Muskadine varieties, that will not succeed
cuttings. Tolerably large well rooted vines he offers at 25 cents each, as t
medium price—or those of two years growth in the nursery—and larger
smaller at proportionate rates. Cuttings at rates of three and four dollars p
hundred. Best American wines may be had at from twenty to ninety dollars p
barrel, according to quality—well bottled or in kegs, proportionately. Casks,
well as bottles, put in boxes to prevent abstraction or adulteration in dista
conveyances. Terms—cash remittances, or equivolent, before boxes forwarde
Any letters to him or to his agents, Peebles, White & Davis, Petersburg, V
post-paid, will receive prompt attention. It is respectfully suggested that a
order so far as not definite, commit the selection of articles to the propriet
and will take special care to give the full value of remittances, saving incident
expenses to first place of destination. At about two per cent. insurance for s
arrival had, if desired, at *Petersburg, Va., through* the above house there; a
and in *case of non-arrival, the money will be* refunded, or another box forwar

that, or next season for planting. But, heretofore boxes have arrived sooner or later to quite distant places of designation; for instance—a box of Scuppernong vines sent by *water* route to New York and New Orleans, some years since, to J. Noyes, Esq., Natchez, Miss., reached him in time to save most vines, though not forwarded till midwinter. Though the fall or early in winter is the safest time to forward vines for the distant South, Mr. Noyes reports his Scuppernong to have borne finely the second season after planting; and to have proved the finest grape in his vineyards at Holy Wood, near Natchez; and that the Scuppernong wine enclosed in the box as a present, was pronounced excellent by the best judges. By the same route two barrels of Scuppenong wine boxed. and bottles in corners of the boxes forwarded to John A. Binford, Granada, Miss., arrived in safety, and the contents were highly extolled by him and other gentlemen of high standing in that State. Last winter a box, by same course of conveyance, reached St. Louis, Mo., its place of destination. But, both in regard to timely arrival and certainty, early orders are desirable. Address the proprietor.

SIDNEY WELLER, M. D.

BRINKLEYVILLE, Halifax county, North Carolina.

ART. V.—THE COMMERCIAL GROWTH AND GREATNESS OF NEW YORK.

POSITION OF CITIES; ORIGIN OF NEW YORK; EARLY HISTORY, ADVANCES, IMPROVEMENTS, POPULATION, RESOURCES, COMMERCE, PROSPECTS, &C.

THE growth of large cities depends upon the development of the mechanic arts and the facilities they possess for communication with tracts of country around them. The larger the extent of agricultural country which by means of avenues of communication, natural or artificial, can be brought into contact with a city, the more rapid will be its growth, and the greater the magnitude to which operating causes may carry it. While the mechanic arts and the business of exchange are unknown, it results from the regular and irresistible operation of a natural law, that large cities cannot exist. The condition of society would furnish neither the elements of their growth, nor of their preservation. The bulk of the population being agricultural—inasmuch as that food is the first necessary—is scattered over the face of the earth, regulated by the attractions of soil and climate. The supply of wants beyond those of food, must come from cities, either manufactured or imported there—and such cities will rise in localities fixed by the natural avenues of the country. It frequently happens that the fortunes of a city change through the discontinuance of the operation of causes from which its existence was derived—as in the case of a particular manufacture which will no longer find a market. But with the decline of that trade, another may spring up to sustain the existence of the city; as, for instance, a large manufacturing town in the interior of a country may lose its market for the article which gave it importance, but may have acquired commercial habits during its prosperity, and continue a depot for inland trade when its manufactures are no longer profitable.

The city of New York had its origin entirely in commercial interests. The discoverer, Henry Hudson, is said to have sold the title to *the Dutch West* India Company in 1609, and they located the first permanent establishment—which was forcibly broken up in 1618 by the English South Virginia Company, who claimed the title under the discoveries of the Cabots. The Dutch having been re-instated in 1620, by order of James I., the growing importance of the place induced their Government to erect it into a province in 1629, under the name of New Netherlands. It retained this form until the Government of Charles II. took forcible possession in 1664. He transferred it by letters patent to the Duke of York—afterwards, as James II., driven from the English throne for his despotic follies. From him it received the title "New York." In 1673, when the Dutch ruled the ocean, entered the Thames and burnt the British shipping—at the moment Charles and his court were playing at romps at the house of the Dutchess of Portsmouth—New York passed into their hands. It was restored to the English by treaty in 1674. Through all these changes the colony preserved its commercial character. The causes of its origin had little analogy with those of other settlements. New England, Pennsylvania and the Southern States, had more the character of religious asylums for the oppressed, than New York—which was located purely by commercial adventurers, with a view to trade; and this distinctive character it has retained to the present day. The first charter of the city was granted by James II., April 22, 1686. The mayor, recorder, sheriff, town clerk, and clerk of the market, were appointed by the King, directly or indirectly; aldermen and assistants were chosen annually by the inhabitants of each ward. The corporation, styled "The Mayor, Aldermen and Commonalty of the city of New York," were authorized to make improvements, *but not to interfere with vested rights, but by consent of the owners.* In 1708, Queen Anne confirmed the charter and gave power to establish ferries. In 1732, George II. confirmed the charter with modifications. The city was made free, and the power of the corporation increased, particularly in respect to the right of making improvements without the limitation of assent of private owners, required by the grant of James. Since then, the changes in the city charter, by acts of legislation and by State constitution, have been mostly modifications of the charter of George II. The charter, as it now stands, is a singular illustration of the changes which have been wrought in the government of the United States, by their transition from a state of colonial subjection to national independence, and by the general progress of opinion throughout the country. It is a fabric of arbitrary powers resting upon a popular basis. Almost all the grants of English Kings have been retained; but in confirming and extending the authority of the municipal government, its organization has been subject to the popular principle of representation, and the citizens have, directly or indirectly, a voice in the election of officers. The most arbitrary and oppressive existing power, is that of taxing property *beyond its value,* for purposes of improvement. Did this not rest on forms of popular sanction, insurrection and revolution would be the immediate result. Another is the power of police justices to arrest and *imprison an individual at their own discretion, without the form of trial by jury, for six months.* That this extraordinary power *exists, is the best proof that it has* never been abused.

The police of New York has been rather remarkable for success in detecting, than for vigilance in preventing, crimes. There are few instances of a crime of any magnitude having been perpetrated, in which the actors have eluded punishment. Still, the city has had the reputation of having the worst police of any Northern city. Of late it has been organized on a new footing, which has been found four times as expensive, if not more efficient, than the old.

POPULATION OF NEW YORK.

The population of the city has progressed with remarkable rapidity. The aggregate numbers of the city and State, from remote periods, compare as follows:

	STATE.	CITY.		STATE.	CITY.		STATE.	CITY.
1696,	30,000	4,302	1790,	340,121	33,131	1830,	1,918.608	202.58
1731,	50,000	4,622	1800,	586,756	60,489	1835,	2,174.517	270.0
1756,	100,000	10,381	1810,	959,049	96.372	1840,	2,428,921	312,71
1773,	163,000	21,870	1820,	1,372.812	123,706	1845,	2,604,495	370,10
1786,	301,100	24,614	1825,	1,616,458	166,086	1847,*	2,674,763	394,45

Prior to the first regular enumeration of 1790, the figures depend upon uncertain date, but thus given as from the best authorities.

We have remarked that the origin and growth of New York hav depended, in an eminent degree, upon commerce; accordingly, th ratio of increase of the population has always fluctuated with th course of events in regard to general commerce. Whenever the general trade of the country, from whatever cause, increased in magnitude, the resources of the city of New York, which early began t assume the character of a general market for the whole country, wa brought into full operation. An increased demand for men and mone arose, which was supplied rapidly from other quarters. The firs great increase in the city population, was from 1790 to 1800—according to the ratio of which, the population would have doubled in twelv years. That decade was one of unexampled commercial prosperity The old world involved in wars, was making constant demands upo the industry of the New; and the produce of the interior and of th neighboring States was pressing to the Atlantic, whence the shippin of New York carried it abroad and returned with goods for distribution. The amount of business transacted in New York wonderfull increased, and its attendant profits drew thither capital and men t participate in them. The decade 1800 to 1810, presented a chang in affairs. More than half of that period was fraught with reverse Captures, condemnations, embargoes and acts of non-intercourse diminished the capital of the place, as well as the profits. The discouraged enterprise, and the general depression of business relaxe the stimulus that had drawn numbers to the city in the previou decade. In the succeeding ten years, actual war destroyed the commerce that before languished. From 1812 to '15 foreigc trade wa extinct, and no principle of income was in operation. From 1815 t 1820, trade again revived; but the rate of increase from 1810 to 182

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*Estimated according to the ratio of increase in the preceding five years.

far below that of any other decade—while the increase in the
lation of the whole State was more rapid than ever: a fact
ı, in an extraordinary degree, evinces the importance of commerce
e prosperity of New York. From 1820 to 1825, commerce was
erous, and the population of the city swelled in proportion.
is to be remarked, however, that commerce did not recover the
e of prosperity it had enjoyed from 1790 to 1800—for the obvi-
eason that European wars had ceased, and industry and naviga-
ad revived, to deprive America of the sort of monopoly she
reviously enjoyed. In the year 1825, a new element of pros-
was brought into operation, in the construction of the Erie
—which opened to the command of the city not only the agri-
al products of the fertile valley of the Genesee, but also of the
coast of the Northern Lakes. The prosperity growing out of
ccession of wealth, added to the general speculative disposition
ent throughout the world, conspired to make New York the
of financial and commercial operations; and from 1830 to 1835,
rgest actual increase in numbers took place, which ever occurred
e space of five years. From 1835 to 1837, the speculative fever
ued to rage, and the population of the city to increase. From
to 1840, the revulsion took place—and with it a desire to leave
ity for western enterprise returned. Farms which had been
d into building lots for paper cities, were again put under the

During the speculative mania real estate rose in price, and the
l was laid out in town lots to its utmost limits. Large quanti-
f goods were manufactured on credit for Southern and Western
mption; importations were immense, on credit, sales as large,
ise on time. All these operations gave employment to, and
d a demand for, work-people, whom the high wages drew into
ty. Business and capital also flowed thither; and the numbers
people, as well as the sale of real and personal estate, rapidly
ented. When the revulsion took place, the reverse of this pic-
as presented: building stopped—real estate fell in value—large
tions failed—people were thrown out of employ—and many left
ity to seek, through the exercise of industry in the Western
ry, the fortunes they had hoped to realise in city speculations.
ncome from 1835 to 1840, was much less than in the previous
of ten years; and for the decade ending with 1845, the increase
mething less than that ending with 1835. The growth of the
y wards since 1835, has been as follows:

CENSUS OF THE CITY OF NEW YORK.

	1825	1830	1835	1840	MALES.	FEMALES.	TOTAL.
- - -	9,929	11,331	10,380	10,629	6,549	5,681	12,230
- - -	9,315	8,203	7,549	6,394	3,947	3,015	6,962
- - -	10,201	9,599	10,884	11,581	6,449	5,451	11,900
- - -	12,210	12,705	15,349	15,770	12,138	8,682	21,000
- - -	15,093	17,722	18,495	19,159	9,501	10,861	20,362
- - -	20,061	13,570	16,827	17,198	9,716	11,907	19,345
- - -	14,192	15,873	21,481	22,982	14,239	16,607	38,846
- - -	*24,285*	*20,729*	*28,570*	*29,073*	14,295	16,612	30,907
- - -	*10,956*	*22,810*	*20,618*	*24,795*	10,010	10,983	20,993

WARDS.	1825	1830	1835	1840	MALES.	FEMALES.	TOTAL.
10th - - - -	23,932	16,438	20,926	29,026	13,339	13,920	27,259
11th - - - -	7,344	14,915	26,845	17,052	6,879	6,499	13,378
12th - - - -	7,938	11,808	24,437	11,652	10,750	11,661	22,411
13th* - - -		12,598	17,130	18,517	10,065	11,038	21,103
14th* - - -		14,288	17,306	20,235	8,142	11,310	19,423
15th† - - -			13,202	17,755	19,723	20,614	40,337
16th‡ - - -				22,273	12,556	14,591	27,147
17th§ - - -				18,619			
Total - -	165,086	202,589	270,089	312,712	180,365	190,737	371,102

There is now an Eighteenth Ward, constituted in 1846, from the others. The great increase in the population is in the up-town wards; and it has been promoted, or in fact made possible, only by increased facilities of locomotion.

Manhattan Island presents somewhat the form of a boot—whereof the toe is the Battery, and the heel Corlier's Hook, on the East River Broadway runs from the Battery longitudinally, dividing the Island in nearly equal halves. On the East River side are the Bowery and East Broadway, forming two main arteries, through which the population circulates to the upper Wards. The Harlem railroad, commencing at the Park, one mile from the Battery, runs up Center street, through Bowery, continuing on the Fourth Avenue eight miles to the Harlem River, and forms a great artery for the city travel. About the year 1830, when the city had about half the population that it now contains, the difficulty of living at a distance up town, when nearly all the business is transacted in the triangle formed by a line drawn from East to the North River, at three-fourths of a mile from its apex to the Battery, was very great. That difficulty operated much against the growth of the city, and favored the growth of Jersey City and Brooklyn, across the ferries. About that time the Harlem Railroad was projected, and the omnibuses introduced. Thus a number of gentlemen doing business down town, employed a coach, at 12 1-2 cents each, to take them home to dinner. From that beginning the omnibus business has grown until this year the number licensed is 361, and the license money paid, $5,910. The capital employed is, for vehicles, $200,000; horses, $180,000; Harness, &c., £100,000; building, &c., $250,000. Total capital, $730,000. These omnibuses form eighteen lines, that run from all parts of the city to the Battery, bringing down thousands to their business, and thence diverging to all parts of the city in a fan-like form, running to Twenty seventh street, which is 3 1-2 miles from the Battery. They, as also the Harlem railroad, take passengers this distance for 6 1-4 cents each Those constitute the means of the increase of the city. They make the up-town lots available for the dwellings of those doing buisness down in town, and have therefore greatly raised the value of real estate in the upper parts of the city.

The streets are laid out irregularly below Fourteenth street. Com-

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*These two Wards were constituted in 1826—the Thirteenth from the Tenth, and the Fourteenth from the Sixth and Eighth. †Set off from the Ninth Ward *in March,* 1832. ‡Taken from the 12th Ward in 1836. §Taken from the 11th, *in 1837.*

ncing with Fourteenth, they run two miles in straight lines from t to North River, and at equal distances from each other, being mbered up to 155th street, which is 9 3-4 miles from the Battery. ngitudinally, run ten Avenues from Fourteenth street to 155, being mbered from 1 to 10 from East to North River.

One of the greatest elements in the growth of New York, has been e development of the coal trade of Pennsylvania, which affords an ple supply of cheap fuel to meet the growing demand. Where od is in common use as fuel, a great augmentation in price inevitay follows an increase in the number of the consumers, to say nothing the demands of steamboats and factories. Forests are limited in eir power of production: a large and increasing population will sume more rapidly than nature can produce; and the demands of augmenting population upon new lands for agricultural purposes re constantly narrowing the limits within which the powers of nature e in operation. Old countries have, therefore, of necessity, penented the bosom of the earth, for those supplies which could no longer found upon its surface. The importance of coal mines to manuturing industry is quite as great—as there is no country of full pulation where furnaces, if dependent upon the productions of the est, would not yield to such an extension of agriculture as would necessary to supply its inhabitants with the means of subsistence.

About the year 1825, when the Erie canal was about to give such impulse to the business of New York, the mining of the great nnsylvania coal basin commenced a supply of fuel, which has bee one of the most remarkable features in our national industry. he great coal valley of Pennsylvania is 60 miles long and 5 miles ide—covering 300 square miles, or 192,000 acres. The several mines covered and probed amount in thickness to 70 feet—which, accordg to the usual estimate of coal, gives 119,000 tons per acre. If half this region should be worked, it would supply an annual demand f 11,000,000 tons for 1,000 years!

This is the ample depot of fuel for the service of Atlantic cities, ened in 1825, when the export was 34,593 tons. There have been ce constructed five great avenues to bring that coal to market, viz: e Lehigh canal, the Schuylkill, the Delaware and Hudson, the Morris nal, and the Reading Railroad. These five works cost, in round mbers, $28,000,000, and the quantity of coal brought down has en as follows:

	CHUYLKILL. CANAL.	READING RAILROAD.	LEHIGH.	LACKAWANNA.	ALL OTHERS.	TOTAL TONS.
30	[illegible]		11,750	43,000		174,734
35	339,508		131,250	90,000		560,758
39	452,251		225,288	148,470	39,365	865,444
42	491,602	49,290	272,129	205,253	89,727	1,108,001
47	130,142	1,255,567	635,015	352,144	228,986	2,702,857

Before the construction of the Reading Railroad, the Schuylkill al had a monopoly, and the price in New York was held as high metimes as $14 per *ton—a price which greatly* retarded the bringing t *into general use. When the Railroad* was completed, it speedily took the business, and now delivers one half the supply. By competition the price was reduced, and at retail in New York va from $5 50 to $6 per ton. It is now $6. At this rate the valu the product this year is $16,217,142: a large proportion of this is consumed in the city of New York. It is manifest how great influence the development of this trade has had upon the prospe of the city.

As we have stated elsewhere, the population of New York is ceedingly diversified, and has perhaps less of national character most other cities. Indeed, its floating population is largely supp from immigration. The number of immigrants that have arrive New York for four years, ending July 31, is as follows:

1843-4	51,307	1845-6	9
1844-5	70,330	1846-7	15

The whole number of arrivals for twelve years, was 855,360. large immigration of the last year was mostly owing to the distress famine abroad. Of the arrivals in 1846, 54,226 were from Bri ports; and in 1847, 88,733 came from the same quarter. The con influx of strangers produces a mixed population, inasmuch as th large portion of each arrival remains in the city. Thus, accordin the census of 1845, the nationality of the inhabitants was as follow

Born in New York State,	194,916	Born in Great Britain,	9
" " New England States,	16,079	" " France,	
" " Other U. States,	25,572	" " Germany,	9
" " Mexico and S. America,	508	" " Other places,	

This gives a total of 365,059—which shows a discrepancy of 6 from the return in the above table. This arose from the fact tha returns of the 15th ward, as first made, were not received by the missioner, and a re-enumeration was made of that ward, withou scribing the nationality.

This population, numbering in round numbers 400,000, now den covers one-third of Manhattan Island—and, at the same rate of inc that has been carried on in the last 30 years, the year 1880 will the whole Island densely settled to Harlem river, with a populatio 1,200,000 souls. The increase of New York and Brooklyn, comp has been as follows:

	NEW YORK.		BROOKLYN.	
	Population.	*Increase.*	*Population.*	*Increase.*
1828,	123,706		7,175	
1830,	202,587	63,8 per cent.	15,396	114,6 per ce
1840,	312,710	44,7 "	36,233	135,3 "
1845,	371,102	17,3 "	59,566	64,3 "

This great increase of Brooklyn, which has raised it nearly to what New York was in 1820, has grown out of the fact that to be business, and to escape the high taxation of New York on pers property, many persons do business in the city and reside across ferry.

ASSESSED VALUE OF PROPERTY.

The value of property in New York has fluctuated greatly in those years of speculation and revulsion to the influence of which, on the prospect of population, we have alluded.

AGGREGATE VALUE OF ASSESSED PROPERTY IN NEW YORK.

1816,	$82,074,250	1827,	$112,211,926	1838,	$264,152,941
1817,	78,895,735	1828,	111,130,240	1839,	266,789,130
1818,	80,254,091	1829,	112,526,016	1840,	252,843,163
1819,	79,113,061	1830,	125,288,518	1841,	251,777,702
1820,	69,530,753	1831,	139,280,214	1842,	237,806,901
1821,	68,285,070	1832,	140,302,618	1843,	228,001,869
1822,	71,289,144	1833,	166,495,187	1844,	235,960,047
1823,	83,431,170	1834,	186,548,511	1845,	239,995,517
1824,	87,480,026	1835,	218,723,703	1846,	244,952,404
1825,	101,160,046	1836,	309,500,920	1847,	247,152,303
1826,	107,447,781	1837,	263,837,350		

This gives the taxable value for thirty-two years, from the close of the war, through all the vicissitudes of the revolution in 1820–'21, when the late United States Bank came near its suspension, the recovery of business and the impulse given to it by the opening of the Erie Canal until trade ran into the wildest speculation, carrying values to their highest point, in 1836. From that year as speculation subsided, valuations fell year by year, until 1843, when they reached their lowest point, at a fall of $81,499,031, equal to the whole value at the close of the war. Since 1843, the values have again been in advance. This recovery has been, however, altogether on the side of real estate, the valuation of personal estate having continued to decline. The mode of valuation, however, and the high rate of taxes imposed, have conspired to make the assessment a very uncertain criterion of the real increased personal property.

For the last few years a law has been in force requiring the valuation to be made in each year between the second Tuesday in May and the fifteenth of August; and giving to inhabitants who may at that season of the year be residing out of the city, the option of being assessed for personal property either in the city, or in the places of their summer residence. For several years past, the rate of taxation has been so high in the city, that these citizens, who are both numerous and wealthy, find it for their interest to pay their personal tax in the country, by which they make a saving, commonly, of more than one half. If they reside out of the State during the period between the second Tuesday in May and the fifteenth of August, the chance is, that they pay no personal tax any where.

The following table shows the relative increase of real and personal property with the annual taxation of the city, which includes the county:

ASSESSED PROPERTY OF NEW YORK CITY, WITH THE ANNUAL TAX LEVIED.

FOREIGN GOODS.

[illegible]	REAL.	PERSONAL.	TOTAL.	TAXES.
[illegible]	143,732,425	75,758,617	218,723,703	850,000
[illegible]	233,742,303	74,991,278	309,500.920	1,085,130
[illegible]	196,540,109	67,297,241	263,837,350	1,175,109

YEAR.	REAL.	PERSONAL.	TOTAL.
1838, - - - - - - -	194,543,359	69,609,582	264,152,941
1839, - - - - - - -	196,778,434	70,010,796	266,789,130
1840, - - - - - - -	187,121,464	65,721,699	252,843,163
1841, - - - - - - -	186,347,246	65,430,456	251,777,702
1842, - - - - - - -	176,512,312	61,294,559	237,806,901
1843, - - - - - - -	164,955,314	63 046,575	228,001,889
1844, - - - - - - -	171,936.591	64,023,456	235,960,047
1845, - - - - - - -	177,207,990	62,787,527	239,995,517
1846, - - - - - - -	183,480,934	61,471,470	244,952,404
1847, - - - - - - -	187,314,386	59,837,917	247,151,303

Thus we see that real estate has increased since 1843, w the point of lowest depression, $22,359,072, and in the sa personal property has declined $3,200,000, while the amount has increased $788,875, thus throwing an enormous burden u estate. The aggregate taxation amounts to 102,8 cts. per valuation. This includes the State tax of one mill per $100, by the law of 1842, to make good any deficit that might ari means of paying the State debt. In consequence of the der debt and the enhanced canal tolls, one-half this tax has been and the remainder will be so. A new law has also been p make persons doing business in New York pay taxes on th employed here—a law that will have a tendency to restrain the of Brooklyn.

The business of the city has so improved during the past y with it the profits of trade have been so enhanced as much tc taxation. The following is a table of the foreign commerce sinc

FOREIGN COMMERCE OF NEW YORK.

CALENDAR YEAR.	FOREIGN ARRIV'LS.	TONS.	FOREIGN IMPORTS.	E
1821, - - - - - - - -	912	171,963	$26,020,012	$1
1822, - - - - - - - -	1,172	226,790	33,912,453	1
1823, - - - - - - - -	1,217	226,789	30,601,455	2
1824, - - - - - - - -	1,364	252,769	37,785,147	2
1825, - - - - - - - -	1,436	280,179	50,024,973	3
1826, - - - - - - - -	1,389	274,997	34,728,664	1
1827, - - - - - - - -	1,414	292,872	41,441,832	2
1828, - - - - - - - -	1,277	275,677	39,117,016	2
1829, - - - - - - - -	1,310	281,512	34,972,493	1
1830, - - - - - - - -	1,489	314,715	38,656,064	1
1831, - - - - - - - -	1,634	337,009	57,291,727	2
1832, - - - - - - - -	1,808	401,718	50,995.924	2
1833, - - - - - - - -	1,926	430,918	56,527,976	2
1834, - - - - - - - -	1,932	414,904	72,224,390	2
1835, - - - - - - - -	2,044	464,464	89,304,108	2
1836, - - - - - - - -	2,285	556,730	118,886,194	2
1837, - - - - - - - -	2,071	539,372	68,374,558	2
1838, - - - - - - - -	1,790	468,890	77,214,729	2
1839, - - - - - - - -	2,159	565,335	97,078,687	3
1840, - - - - - - - -	1,953	527,594	56,845,924	3
1841, - - - - - - - -	2,118	549,025	75,268,015	3
1842, - - - - - - - -	1,962	555,315	52,415,555	2
1843, - - - - - - - -	1,832	491,494	50,036,667	2
1844, - - - - - - - -	2.208	593,373	75,749,220	3
1845, - - - - - - - -	2.043	613,349	72,108,111	3
1846, - - - - - - - -	2,293	612,040	70,269,811	3
8147, 11 months, - -			93,862,440	4

The imports of the speculative year, 1836, the same in wl assessed value of real estate was the highest, were larger th

The year 1839 again presented a high figure, but the trade a speculative character, and ended in great revulsions. The is of 1847, in the aggregate, is, however, larger than ever before, orts having swollen to a very important figure, reaching 50 per f the imports. This has arisen from the great export of farm prohich has been supplied in swelling volumes from that great source mercial wealth, the Erie Canal. The progress of the receipts duce from the canals for the last ten years has been as follows:

LUE OF PRODUCE LEFT AT TIDE WATER FROM THE NEW YORK CANALS.

ce of Forest.	*Animals.*	*Vegetable Food.*	*Other prod's.*	*Manufactures.*	*Merchandise.*	*Sundries.*	*Total.*
60,137	3,621,295	10,074,075	383,386	1,878,456	118,188	1,285,817	21,862,354
75,730	4,439,552	10,847,566	355,527	1,574,715	89,428	855,992	20,038,510
56.391	4,217,825	7,650,625	236,849	1,621,762	134,818	1,044,929	20,163,199
18,293	5,167,906	10,888,917	237,140	1,312,231	33,280	1,055,806	23,213,573
45,578	5,582,133	10,766,408	646,407	2,159,832	55,782	1,369,192	23,225,323
41,059	4,827,615	10,340,427	494,847	1,949,541	55,432	1,342,092	22,751,013
56,474	6,357,344	11,237,625	616,660	2,561,159	56,224	1,667,922	28,453,408
16,032	7,788,923	12,634,616	596,527	3,489,670	86,153	2,328,526	34,640,446
59,596	9,002,196	17,579,581	630,404	6,432,259	88,497	3,559,658	45,452,301
89,291	10,633,820	22,286,905	742,093	4,805,799	276,872	3,770,476	51,104,256

these ten years it is observable that the materials of commerce d from a work not in operation in 1825, have doubled, adding 05,256 to the value of articles which sought New York for a t twenty years previously. The accounts for 1847 are not yet up; but the amount will far exceed that of 1846. The following the quantities of four articles that sought tide water in several years:

	1843.	1844.	1845.	1846.	1847.
bbls.. - - - -	2,073,708	2,222,204	2,517,250	3,068,441	3,693,270
t, bushels, - -	827,346	1,262,249	1,620,033	2,950,636	3,801,931
“ - -	186,016	17,861	35,803	1,610,149	5,986,776
, “ - -	543,996	818,472	1,137,917	1,427,953	1,243,372
, lbs., - - - -			965,200	2,034,600	3,562,030
, “ - - - -	24,215,700	22,576,300	21,709,705	21,194,030	22,653,861
“ - - - -			3,097,067	7,347.966	5,237,460
, “ - - - -	24,336,260	26,674,300	27,366,779	35,007,393	40,659,005
“ - - - -	6,216,400	7,672,300	9,417,500	8,553,826	11,221,384

ese large supplies of vegetable food, go to swell the external com- of the city, and are capable of meeting almost any demand the exigencies of Europe may require, while they furnish the s of paying for the large importation from abroad; they also the credits in New York, through which the producers are enabled y for increased supplies of goods, both domestic and imported, red through the Erie Canal. The shipping interest of New York rogressed in the manner indicated in the following table:

	1833.	1836.	1840.	1843.	1836.
tered tonnage, - - - - - - - -	123 052	192,030	203,536	236,970	259,242
ing. “ - - - - - - - -	6,255	934		370	279
“ - - - - - - - -					1,375
otal registered tonnage, - -	129.307	192,964	203.536	237,340	260.896
ing “ - - -	148,302	182,996	166,805	214,369	264,782
steam “ - - -	13,113	19,681	34,754	35,317	45,182
under 20 tons “ - - -	7,974	8,999	9,411	9.745	1.429
hery “ “ “ “ - - -	135	171	290	302	303
otal tons, - - - - - - - - - -	*298,831*	*404,814*	414,817	496,965	572,593

According to the laws of the United States, no vessel can be engaged in the foreign trade without being registered, and no vessel can be employed in the coasting trade without being enrolled or licensed. The registered tonnage, therefore, gives the amount engaged in foreign commerce, showing, comparatively, its progress, and the enrolled, the same in regard to the coasting trade. The shipping of New York is mostly employed in direct trade, while the carrying trade, so called, is mostly conducted by Eastern vessels. The business of navigation is in some degree distinct from that of commerce, inasmuch as the former may be carried on by a country that has no productions, while the latter depends upon surplus productions. Of this latter character is New York commerce, and it thrives most in those years in which the national exports are largest. Not until 1846 had New York any steam tonnage engaged in the foreign trade—the new line of Bremen steamers is the first enterprise of the kind, and the business of 35,000,000 Germans is by it brought in closer connection with New York. The steam tonnage engaged in the coasting trade has more than tripled since 1833. The tonnage engaged in the foreign and coasting trade appears to have progressed in each branch in nearly an equal degree.

In the progress of population, trade and value of property belonging to the city, it has necessarily resulted that the active monied capital has progressed also. To take the increased capital employed in all as a guide in estimating the amount of existing wealth, would be incorrect; for the reason that although insurance capital amounts to $31,000,000, it consists, for the most part, in bonds and mortgage upon real estate, and is, therefore, only a representation of the property already considered under the assessed values. In New York almost every species of fixed property, by means of hypothecation in one form or another, becomes circulating capital, which is constantly changing its form and yielding at every conversion a profit to its employers. In regard to calculation connected with the activity of commercial transactions, the amount of bank capital becomes a more direct guide. In 1826 there were fourteen banks in operation in the city, with an aggregate capital of $13,600,000, exclusive of the branch of the United States Bank, which was authorised to employ $2.500,000. At this time there are in New York twenty-five banks with an aggregate capital of $24,311,760, and the capital of twenty-three of these institutions is assessed as follows:

Owned in New York city,	$13.872,183	Owned by the State, - - -	271,704
" " " " State,	2,052.453	" " foreigners, - - -	2,634,445
" " other States, - -	4,025,871		
		Total, - - - -	$22,856,659

The capital employed in banking at any one time is not, however, a precise indication of the activity of business, as thus—in November, 1843, the same capital was the basis of $65,314,129 which had loaned $80,278,529 in November, 1847, showing that the activity of business as indicated in the table of imports and exports, was one-third greater this year than in 1843.

The city of New York has a large debt contracted for the construction of the Croton aqueduct, by which the city is now supplied with water. The Croton river is a stream of wholesome water running into the North river, and is tapped at a point called Croton lake, covering 400 acres and containing 500,000,000 gallons, by the aqueduct, at a distance of 33 miles from Harlem river. That whole distance is connected by an uninterrupted conduit of stone and brick masonry. The valley of the Harlem river is 1460 feet across, and the aqueduct is brought over in iron pipes, laid upon a bridge constructed of arches, 114 feet above high water mark, at Yorkville, or 79th street on 7th Avenue, 5 miles from City Hall. The pipes discharge into a reservoir 1826 feet long and 836 feet wide, having an area of 35 acres and a capacity of 150,000,000 gallons. From the receiving reservoir a double line of iron pipes, 3 feet in diameter, convey the water two miles, to the distributing reservoir, on 42d street. It is 420 feet square, contains 4 acres and has an elevation of 44 feet above the streets, and a capacity of 20,000,000 gallons. From this reservoir are led the serving pipes which supply the city, and are about 170 miles in length, or 1 mile to 2240 inhabitants. This will supply 35,000,000 gallons of water per day, or 24 gallons to each person when the population shall have reached 1,500,000. This stupendous work cost in the neighborhood of $14,000,000, and was undertaken by a direct vote of the people on the question—"water" or "no water." The water is supplied to dwellings at a general rate of $10 per head—besides 600 free hydrants and 1500 fire hydrants. The income of the water is specially pledged as a sinking fund for the redemption of the debt. The number of water takers in 1844 was 7171 private dwellings, paying $72,123, and 2421 public buildings and factories paying $59.660. making together 9582 takers, paying $131,784. In 1846–7 the number of takers had increased to 15,000 and the revenues to $194.561. The public debt created chiefly for this object is as follows:

PUBLIC DEBT, CITY OF NEW YORK, 1817.

			Annual Inter'st.
5 per cent. city stock of 1820 and 1829, due in 1850,		$250,000 00	13,500
5 do. fire loan stock, due in 1851, - - - - - - - - -		500,000 00	25,000
5 do. public building stock, due in 1856, - - - -		515.000 00	25,750
5 do. fire indemnity stock, due in 1868, - - - - -		375,088 00	18,751
Water debt, as follows:		$1,610,088 00	82,004
7 per cent. water loan stock, due in 1852, - - - - - -		890.207 00	62,314
7 do. do. do. 1857, - - - - - -		989.488 00	69,264
5 do. do. do. 1858, - - - - - -		3,000,000 00	150,000
5 do. do. do. 1860, - - - - - -		2,500,000 00	125,000
5 do. do. do. 1870, - - - - - -		3,000.000 00	150,000
5 do. do. do. 1880, - - - - - -		1,375.577 00	68.773
5 and 6 Croton water stock, due in 1890, - - - - - -		385,000 00	15.100
6 per cent. temporary water loan, before 1849, - - - - - -		757,910 00	45,474
		$12.898,182 00	767.929
Deduct proceeds of water stock in banks, to the credit of the water fund, - - - - - - - -	110,166 33	$12.788.015 67	
Nett amount of debt, - - - - - - - - - - - - - - - - - -		$11.428,103 67	
Less mortgages and bonds in sinking fund, from sales of real estate and revenues specially pledged for the redemption of the city debt and cash in bank, to credit of the fund. - - - - - - - - - - - - - - - - - - -		$ 2,679,724 28	
Actual amount of city *debt on the 30th April, 1847*, - -		$11,718,379 39	

An ample sinking fund is in active operation to redeem this c completely in a period of forty years. The expenditure of the as indicated in the above table of annual tax imposed is, for 1: $2,542,361—out of this $147,000 was for State tax. The leac general heads of city expenditures are—common schools $261, police $400,000, Alms House $343,000, interest city debt $767, lamps and gas $129,137, cleaning streets $135,000, water p $54,403, salaries city officers $233,000, and the balance for su expenditures.

The city of New York has paid much the largest portion of the S tax: as thus, in 1842, when the mill-tax was imposed, it amounte the State to $619,693; of this, New York city paid $237,807—or fifths of the whole. The census of 1840 gave the State populati 2,428,921, and the city at 312,932—or one-eighth only of the po tion. The property owned by the city of New York consists of descriptions, viz: property embracing town lots, common lands, rents, and various real estate, valued at $2,638,682, and yields $64 per annum: city real estate, in use for city purposes—city hall, pa grounds, schools, markets, &c., valued at $22,468,397, and produ $403,355 per annum, as follows:

	VALUE.	INC
Available Property, - - - - - -	$ 2,638,682	$ 64
Not saleable, - - - - - - -	22,468,398	403
Total, - - - - -	$25,107,080	$467

Although New York, through force of geographical and exte circumstances, has grown thus rapidly, there have been many cause operation to retard its progress. These have grown mostly ou vicious legislation, general and local. In recurring to what we l pointed out in the fluctuation of the city's prosperity with the flourisl or decaying state of the external trade, it becomes evident the wel of the city depends, in an eminent degree, upon the entire freedom which capital in the shape of goods, produce or money can flow secu in and out to profit by the current state of events. New York hol relation to the whole trade of the Union different from that of other city—and also far superior in regard to it, than that held by commercial city of Europe, in regard to the interior country. All other cities of the United States are centres of local business. Mo concentrates that of Alabama; Charleston of South Carolina, Geo and Baltimore of the tract watered by the tributary streams. Pl delphia looks mostly to her own State, having, however, stretc forth an arm through her canals to Western tracts. Boston is common centre for New England business, and, well has she impro her local advantages by means of railroads—of which 700 miles o every remote section of the New England States and converge in every trade and travel upon Boston—she has also greatly enlar her connection with the West, by overcoming natural difficulties means of the Western railroad. New York, however, by its ca makes tributary the whole Northern and Western States, and shipping commands the coasting trade to New Orleans. It is point to which a large proportion of the surplus produce of ountry goes for sale, and whence it is exported to Europe. Two-thirds f all the goods imported into the country arrive here. Under these ircumstances it is necessarily the financial centre of the Union, inasmuch as that the largest number of importers are here. It is the market r bills drawn against produce sold abroad, consequently when roduce is shipped to Europe from the South, the bills are sold in New ork and become the basis of inland bills, which are again the edium in which dealers from all parts of the Union pay New York r goods bought of her. Where large amounts of goods, produce and ills come for sale, there is necessarily required large monied capital. New York has always had an insufficiency of this, and mainly because f absurd usury laws and laws discriminating against foreign capital mployed here. The law of New York allows seven per cent. interest nly, and forfeits a debt for taking a higher rate. Frequently, money is worth more, as for instance—when money is plenty and heap considerable sums are employed in cotton, a hazardous trade; hen money rises in value above seven per cent., it will not stay here risk forfeiture, and New York business suffers. Cotton then goes Liverpool, where the usury laws do not apply to it, and New York s trade. Immense sums of foreign capital, loaned in good faith, e been lost by a plea of usury. Capital has also sought New York employment in insurance, but for many years was driven away by t of ten per cent., to protect insufficient domestic capital. The laws of Congress, which aim directly at that foreign trade on h, as we have seen, the prosperity of the city depends, have dealt ely with its interests. Another great evil has been the control corporate banks has exercised over all commercial proceedings. frequently sacrifice commercial interests without reason and ut remorse.

none of the cities of Europe are the commercial interests in ower of banks; the bulk of the business of discounts and nge is done by large private bankers, men of great information, sing application and untiring industry. These persons have a nd knowledge of all that concerns commerce and finances. They all their customers personally, their wants and their business. are the *finance clerks* of the commercial community around and are identified with its interest. In New York a number of orated banks with interests antagonistic to the commercial comy. are conducted by salaried officers, for the most part destitute ntific knowledge, of very moderate abilities and loose business These persons lend freely at one time, and at another, under fluence of panic and vague fears, they begin to harrass each for specie balances, refuse all loans, and throw the commercial nity into a paroxysm of distress, causing produce to be sacria lvances to cease and the whole chain of business throughout ntry to be deranged; being utterly unable to assign any better for the panic than their own thoughtlessness and want of fore- Such is pretty nearly the case at this moment. In August, the bank loans were $80,746,671; on the 20th of that month arrived of the *failures in England with most gloomy prospects, g considerable discredit in relation* to bills. Packet after packet brought similar tidings, and November 1st found the bank loans $80,558,529. In these two months of disastrous news the banks had made no preparations to meet a reverse. In the first week in November they got alarmed and suddenly refused all loans—causing great distress and large losses in sacrificing cotton, produce, goods and stock to raise money. Such follies as this are never committed by private bankers. They do not lull the community to sleep and destroy them when a fit of delirium tremens comes over them. This abominable mismanagement of money affairs has been a great drawback upon the prosperity of the city. The abolition of the usury laws, the removal of all disabilities of foreign capital and the substitution of private bankers for miserable corporations are only requisite to make New York the chief city of the world. The petty institutions with their small ways answered when New York was in its infancy, but she has now outgrown them, and moves like a giant oppressed for breath. The discredit which has overtaken English merchants and the waning influence of London, point to New York as the future queen of commerce.

Art. VI.—J. P. BENJAMIN'S ADDRESS ON AGRICULTURE.

The following paper was prepared by our distinguished fellow-citizen. J. P. Benjamin. Esq., to be delivered according to invitation, before the Agricultural and Mechanics' Association of Louisiana. The annual meeting of that Association having been postponed to a period when it will be impossible for Mr. Benjamin to attend, he very kindly, at our request, furnished it for publication in the pages of the Review.—Editor.

On the receipt of the invitation with which I have been honored, to deliver your annual address, I could not mistake the motive which prompted your selection, and felt satisfied that it was your desire to hear an account of what during a recent visit to Europe, had suggested itself to one having a common interest with yourselves as most worthy of attention, or as likely to afford instruction in your pursuits. I will therefore, endeavor to meet your wishes by a simple narrative of what I have learned, either from personal observation or from works to which you may not yet have had access.

But first allow me to remark, with a just sentiment of pride, that nowhere, during a somewhat extended excursion through the middle and South of France, did I witness any cultivation on a large scale, with which I would be ashamed to compare the estates of our best planters, whether of sugar or cotton. True it is, that no one can travel through the older countries, where wealth is so unequally distributed, without being compelled to pause with admiration and delight on some lovely landscape, where nature's choicest gifts have been enhanced in value and in beauty by the cunning hand of art; or where lavish expenditure guided by exquisite taste has succeeded in converting even the most barren soils into parks and gardens and pleasure-grounds of surpassing charm. But for skill in cultivation, system in management, economy in administration, combined with a liberal expenditure improvement, both agricultural and mechanical, and a judicious plication of labor-saving devices. it has been my good fortune to have itnessed on the estates of some of the gentlemen of this association, odels of plantership which would advantageously compare with any ing that I have seen amongst the farmers of Europe.—Whilst in the pirit of enterprise, in the desire for progress, in the ardent pursuit of nprovement, which all characterise our intelligent agriculturists, you re as a class, immeasurably their superiors.

It will be obvious, that any information to be acquired abroad, can ut remotely affect the interests of one of the two great classes of the lanters of our State. No cotton is grown in Europe, nor has the science of European savants or the skill of European mechanics been irected in a manner worthy of notice to the improvement either of he plant or its preparation for the market: and with but one exception, I fear that what I may have to say, will afford but little interest to the entlemen engaged in that culture.

But, gentlemen, there is an application of the power of steam which eeply interests the agriculturalists, not only of this State, but of all ountries. Ever since the genius of Fulton first launched the boat that ploughed the opposing water with steady impulse and resistless power, the splendid results that would follow upon a similar conquest on the land, have excited the imagination and stimulated the ingenuity of the inventive minds of all countries. Indeed, if we reflect on the immense xpanse of the richest soil which in our country awaits nothing but the pplication of such a vast labor-saving machine as a convenient and ffective steam-plough; whether on the alluvial plains of the South, apable of supplying half the globe with its sugar, or clothing millions ith its cotton—or whether we picture to our minds the boundless rairies of the Northern portion of this great valley, ready to furnish o the whole family of man grain in such teeming abundance, that the avies of the world would not suffice for its transportation, it seems carcely possible to overrate the benefit that will be conferred on mankind by him who shall first teach it to till the ground by the power of team. It would serve no purpose to enumerate the many abortive fforts made to accomplish this end. Numberless have been the devices suggested. Occasional experiments have promised success, and een abandoned. When the effort has been made to attach the plough o the steam carriage, the great weight required in such carriage for fording a fulcrum when the share enters a tough or clayey soil, has roved an insuperable obstacle, independently of the other formidable echanical difficulties in the way of ensuring a steady and uniform ction at the volition of the engineer, and of preventing the ploughshare from being suddenly and violently diverted from its path on eeting any obstacle in the soil. When it has been attempted to nder the steam-engine stationary in a measure, and to apply its wer by connecting with it the plough by a chain or rope, and then rawing the plough from one end of the furrow to the engine at the ther end other and still greater objections were presented, and all opes of success had for years past apparently been abandoned.

Such, so far as I have been able *to learn*, was the situation of this teresting *problem when it became the* subject of discussion about twelve months ago, at a dinner party of gentlemen in Paris, who ha just been in attendance at an agricultural meeting. Amongst th guests present was one who was neither engineer nor mechanic, b who had received that early education in the physical sciences deeme necessary as a preparation to the practice of the medical profession, f which he was destined. He had taken no part in the conversation, b remained an eager and silent listener, except to ask some question those persons most familiar with the history of the abortive expe ments already attempted. He left that convivial meeting with t secret but determined purpose to devote all the leisure moments of lifetime, if necessary, to the solution of this mechanical problem; a in ten months afterwards announced his conviction of success. I narrating the course of thought which led to this result, he was sing larly interesting. He commenced by asking himself what was t object and purpose of the act of ploughing the soil? certainly to su divide and render it friable; to turn under the surface and replace by the subsoil, thus exposing the latter to that atmospheric and sol influence which both theory and experience point out as so eminent beneficial, and finally to perform on a large scale the weeding proce when the nature of the case would permit it. The next question w why to do this labor is it necessary to draw a ploughshare through t soil? is there no other mechanical contrivance by which it can be lift up and turned over? how does the gardener proceed in small enclosur not admitting of the working of a plough? it is by the spade, whi performs its work in a manner to adopt the soil to the very nicest a most delicate culture. Proceeding on these considerations, he co structed a small steam-carriage, between the wheels of which placed a cylinder which revolved on its axis. On the surface the cylinder he placed small blades similar in shape to the h and which he distributed in rows on the surface in a manner simil to that in which the teeth of the harrow are arranged, so that in turni the cylinder the blades of each row would strike the earth in the spac left untouched by the preceding row. He used great ingenuity in arranging his carriage, which runs on wheels of broad tread, as enable him to turn it in a space not exceeding that usually reserv for turning-rows in the field, and the blades on the cylinder were arranged as to be lengthened and shortened at pleasure for deep light ploughing. As may be imagined, in a first essay many diffic ties suggested themselves requiring alterations and changes in h machinery, and it was a mere piece of patchwork, of very little streng and clumsy appearance when all its parts were so arranged as to satis him of its success. In this imperfect state the carriage was sent f experiment in September last to the park of the Marquis of Nicol near Paris, and in order at once to put it to a severe test, a piece of st and clayey ground was selected, covered with a thick turf, the roots which formed a heavy network on the surface. It was discovered th from some defect in the boiler steam could not be generated nearly fast as required, yet, under all these circumstances two acres of t ground were ploughed or rather worked in such mannner as to crea the utmost satisfaction amongst those called together to witness t *experiment.* The action of the instrument was such as to give t earth left behind it the appearance of a field not only ploughed, but harrowed: it was turned in as small a space as is usually required for turning a plough: it was stopped, backed, slackened or hastened in its movements at the will of the conductor; the ground was ploughed to various depths as desired by the spectators, the rapidity of advance being of course lessened in proportion as the depth increased: and no single objection to its mode of work was suggested by any of the scientific agriculturists called to judge the machine, which in its imperfect state and with much less than its proper strength and power, had done, according to the closest calculation, the work of six heavy ploughs, and was easily susceptible of doing double the quantity in the same space of time. I had not the pleasure of witnessing the experiment, but was informed by an eye-witness of the result, and afterwards saw a most flattering account of the success of the machine in the "Moniteur Industriel." The inventor had taken out a patent, and was engaged in having a new instrument constructed with care, and of sufficient strength and power to stand tests much severer than the one to which the first was submitted; and although it may be too soon to say with certainty that human intelligence has made this great conquest in mechanical art, I think you will agree with me that there is every reason to believe that the course of invention has at length assumed the right direction, and that the original idea on which the work has been constructed, is one so simple and so evidently applicable to the object sought for, as to assure us of the ultimate attainment of that great desideratum for the agriculturist, a machine that shall plough and weed by steam—a machine adapted to do this work on all surfaces on which a carriage could run, and on all soils except such as may be covered with stones or stumps.

The chief object of inquiry abroad for any one interested in the agriculture of this State, is evidently the manufacture of sugar; and it was to this subject that my attention was particularly directed. No observer can fail to remark the great disparity which exists in the means for instruction and improvement which prevails between the manufacture of cane-sugar in this country and beet-sugar in France. Paris may fairly be considered as the great centre of the civilized world, as regards all subjects of scientific inquiry; and I am not aware that in any other country have the researches of men of science been so ardently and extensively directed to the practical application of the discoveries of the laboratory to the improvement of manufacturing industry. Those engaged in the manufacture of sugar have been peculiarly favored in this respect, and ever since the project of Napoleon for rendering France independent of the colonial production of sugar was first carried into operation, all the rewards of a powerful Government and all the honors to be attained in a community attaching the highest value to literary or scientific distinction, have been lavished on those whose researches and experiments have enabled the manufacturer to apply on a large scale those improvements in the different parts of the process which the chemist first essays in the careful experiments of his laboratory. *The men who conduct their manufactories and refineries are in very many instances carefully educated with a view to this pursuit, and only* enter into the practice of their art after being intimately acquainted with its theory in all its branches. With those principles of physics and mechanics which will enable them thoroughly to understand the working of the machinery employed, and with those discoveries of modern chemistry which can best enlighten them as to the real nature of the delicate and beautiful process by which a darkly colored and impure fluid is converted into a chrystaline product of snowy whiteness, sparkling grain and perfect purity. The advantages possessed by such men, surrounded by all the means and appliances of advanced civilization, with ready reference on all subjects of doubt or difficulty to men of eminent scientific attainments, and with every facility for obtaining at the cheapest rate, the supply or repair of machinery and material of every kind, over the indolent or ignorant colonial planter, or even over our own more intelligent agriculturists are inappreciable. The practical results of these advantages has never been more apparent than within the last few years. The beet-sugar manufacturers, employing a raw juice containing chemically only twelve per cent. of its weight in sugar and so impure as to render the extraction of this small proportion a process requiring great care and skill, had obtained so marked a superiority over the colonial planter, who operates with cane-juice, which is comparatively pure, and contains more by one-half of saccharine matter, that the loud complaints of the latter extorted a legislative enactment avowedly intended to destroy the beet-sugar industry, and establishing a scale of duties deemed sufficient for effecting that object. The only consequence of this enactment, however, was to stimulate the ingenuity and enterprise of the European competitor to such an extent that by his superior skill and intelligence new progress was made in his art, and in the last year the quantity of beet-sugar produced in France was equal to the whole amount of importation of colonial sugars, each being equal to about 150,000 hogsheads. We can scarcely conceive, accustomed as we are to the routine of our sugar-houses, how ardent is the spirit of inquiry and how prompt the practical testing of any scientific discovery bearing upon this subject. A striking proof of this will be found in the following fact. In the weekly accounts published of the sittings of the Academy of Sciences, in February, 1846, was a paper submitted by Mr. Mialte, in which he stated that in the course of his researches he had discovered that oxalate of alumina possessed the quality of neutralizing any excess of lime that might be used in defecation, and that by employing it the yellow color imparted to syrup by the use of lime would be prevented, and the syrup being colorless would chrystalise into white sugar. In March, April, May and June of the same year, there appeared in the "Moniteur Industriel," a semi-weekly publication devoted almost exclusively to the manufacturing and agricultural interests, no less than four articles from sugar manufacturers and refiners, who had made experiments with this new agent on a small scale, and who, while they certified to its efficacy, demonstrated by calculation that it was unsuited for practical purposes, because the cost of the oxalate in the quantity required during the process would be too great to render its use profitable.

I fear, gentlemen, that though much has lately been done amongst *us in the way of* improvement, we are still far in arrear, and that we shall still remain so unless that noble spirit of emulation, which it is the object of your Association to cherish, shall prompt us to cease regarding our manufacture as a mere process of routine to be acquired without previous careful study, and, especially, without endeavoring to attain an acquaintance with at least those general elementary principles of Chemistry, of which our sugar-houses show us the application on a large scale; but I trust the day is not far distant when our planters shall be able to speak as familiarly of acids and of alkalis and their secular properties, as they now do of the high or low pressure steam engine. of the fly-wheel and the safety-valve; for it is assuredly not more important to understand the machinery for the extracting of the juice from the cane, than fully to comprehend the best modes for converting that juice into the marketable product, sugar.

The different stages of the manufacture of sugar as practised in France. are no doubt familiar to most of you, and do not differ essentially from those used on the plantations in this State, which have lately been furnished with the apparatus of Derosne and Cail and that of Rillieux. The whole process of the manufacture may fairly be divided into, 1st, The extraction of the juice from the beet or cane: 2d. The defecation or clarification; the object of which is not merely to cleanse the juice of all feculencies which may be mixed with it mechanically, such as the particles of the pith, the rind and the wax, which become mingled with it in its passage through the mill, but also to separate from it the albuminous and gummy matters which are in solution in it. and the separation of which, whether in the form of a scum or precipitate, is a purely chemical process: 3d, The filtration: 4th. The evaporation: and 5th, The concentration of the syrup to the degree of density required for chrystalization. Independently of information obtained abroad, I have recently received much instruction from two very valuable works, which you have not yet had an opportunity of perusing, and I have no doubt you will feel interested by a statement, although necessarily brief, of what I have gleaned on each of these heads. I will first state that the two works to which I refer are the Sugar Planters' Manuel, by Dr. Evans,[*] published in London in 1847, and of which a reprint is now in course of publication in this country: and the Report made to Congress at its last session by Professor R. S. McCulloh, containing investigations in relation to cane sugar made in Louisiana and Cuba; and I feel no hesitation in saying that no gentleman who will peruse attentively these two works will fail in attaining all the really valuable knowledge on this subject that has been acquired up to the present day.

The first great object of the planter who is about to manufacture the crop which forms the whole return for the labors of the year is, undoubtedly, to extract from the cane all the juice that it contains. Unfortunately, no means have yet been devised by which this end can be completely obtained, and the begass as it leaves our best constructed [illegible] carries with it from one-third to one-fourth of the juice. However [illegible] it may appear, it is nevertheless certain, that the [illegible] m-tents of a cane forms from 88 to 90 per cent. in weight of the entire structure of the stem, and I have taken some pains to ascertain during the present season the yield of juice from our mills of ordinary construction. I found the yield from the three roller mill of average size and run at a speed of 3 1-2 revolutions per minute to be sixty-one per cent: whilst from another of very large size, of which the rollers were 5 1-2 feet in length and 28 inches in diameter, and which was run at a speed of only two and a half revolutions per minute, the yield was 66 per cent, the bagass being delivered from the latter almost pulverized and apparently dry. These results are undoubtedly much more satisfactory than would have been afforded some years ago, still they show that after all the care bestowed in raising our crops from one-fourth to one-third of our produce is absolutely lost; and if we take what I believe a fair average of the yield of juice in sugars, that is, if we assume that one-tenth of the weight of the juice is the product in chrystalized sugar, we find that we obtain only about 6 1-2 per cent. of the weight of the cane in sugar, whereas chemical analysis shows that it contains 18 per cent. One great cause of the diminished yield of juice from the cane is undoubtedly the practice too prevalent of running our mills at too high a speed. Experiments made in Cuba demonstrate that with the same mill and its rollers set in the same way the juice obtained constituted 45 per cent. of the weight of the cane when the rollers made six revolutions per minute, and 70 per cent. when the speed was reduced to two and a half revolutions per minute, showing the enormous difference of twenty-five per cent.

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[*] This valuable work was analyzed and examined in the numbers [illegible] October and November, 1847.—Ed.

The very spongy consistency of the pith of the cane presents an obstacle to the extraction of all its juice by compression that is apparently insurmountable, and the very interesting inquiry at once suggests itself; are there no other means by which *all* the fluid contents of a cane can be obtained? That this can be done on a small sclae in the laboratory is well known, but the difficulty is to effect the object on the large scale and with the rapidity required on a plantation during the grinding season. A patent was taken out in England not long since, by a Mr. Michiel, for extracting the sugar from the cane by an entirely new process thus described and commented on in the Sugar Planters' Manuel:

"It consists in cutting the canes into extremely thin slices and then submitting them to the action of a mixture of lime and water which it is presumed will coagulate and render insoluble the whole of their nitroginised constituents; thus permitting the extraction of the whole of the sugar with the soluble salts by means of water.

"*Were this process as practicable as its admirers seem to think, it ought unquestionably to be universally adopted; for I believe were it* SKILFULLY CARRIED OUT, *almost the whole of the saccharine matter in the cane would to a certainty be extracted.* It remains to be seen, however, whether it is really so practicable, or whether its application would be sufficiently cheap. I much fear that the circular knives by which the canes are to be sliced, if we may judge from what occurs in the slicing of the beet root, will be subject to continual derangement and their edges blunted by the silicious coating of the cane. It may be doubted whether the operation will prove a sufficiently speedy one

nit of its adoption on large estates. The amount of evaporation
ded would also be great. This, it is true, may be obviated by
g the canes thus sliced in a succession of boxes having perfo-
bottoms and placed one over the other in such a manner that
water poured into the upper one will gradually percolate
h each of the subsequent ones, and thus by robbing the canes
ively of the greater portion of their sugar the saccharine liquid
dually become more inspissated as it descends, until, when it
way from the lowest box, it will have assumed the state of a
considerable density.

er the above remarks partly because I think that this system
much that is admirable, nevertheless, like many others, it
the touchstone of experience."

process of extracting the juice from the cane is termed ma-
and is also the subject of remark by Professor M'Culloh.
l amongst the constituents of the cane two gummy matters,
hich is called by chemists pectine and the other albumen.
s probably the most viscid substance in nature, and, conse-
the most formidable adversary to chrystalization. The Pro-
ches us that maceration in hot water will fix the albumen in
but that the pectine will flow out of it with the saccharine
l its separation from the juice then becomes extremely diffi-
t impossible. Where, however, we macerate in cold water,
ne remains in the cane and the albumen flows out with the
ch is then very easily and perfectly defecated by heat which
s the albumen and causes it to rise in a scum to the surface
ice. For these reasons he disapproves of maceration in hot
d objects to that in cold water by reason of the increased
of fuel required for the evaporation.

g thus stated the opinions of the very able writers on this
gentlemen, allow me to inform you that I have from reliable
ascertained that the process of Michiel has actually been
eration on a large scale in the Island of Martinique, and with
cess. and has there caused a yield of from 11 to 12 per cent.
eight of the cane in sugar, on estates which had previously
but six and a half per cent. I have not learned whether
ation is with hot or cold water, nor whether if with the for-
sugar is deliquescent by reason of the presence of pectine in
My object in stating these facts is to stimulate the inge-
hose members of the association who have devoted their atten-
mechanical arts. It surely is a matter perfectly attainable
verbial ingenuity of the American mechanics, to devise such
pparatus as shall receive from the carriers and cut the cane
it is now received by the rollers that crush it, and as regards
fuel in evaporation a very simple arrangement would readily
at objection. If the water be raised to a level above that of
n which receive the sliced cane a series of these cisterns
laced side by side with pipes running from the top of
n of the next. The water would enter the first by
its bottom from the *reservoir. and* as the level of th
ervoir would be higher than that in the cisterns th.

rising through the first would overflow into the second, and from that to the others in the same manner. It would then flow out at a density fully equal to that of cane juice and probably much greater. The effect of such an arrangement would be not to mix water with the juice so as to dilute it, but to displace the juice by water in each successive cistern. The cisterns would of course require to be covered and a *pese sirom* of *Beaume* might be inserted into the top of each, which would plunge in the fluid and indicate when the saccharine matter had become exhausted by gradually sinking to zero. It would not be difficult so to arrange by cocks and connections with pipes that the water could run from the reservoir directly into any one of the cisterns, and so that it should run out of that last filled with the fresh slices of cane. If an apparatus on this or similar principles could be carried into operation on a large scale, a scale sufficient to take off the crop of the most extensive plantations, its results would be enormous: the whole sugar crop of the State would be at once doubled, and the inventor would reap the richest rewards for the time, labor and talent expended in perfecting it.

On the next process in the manufacture, that of defecation, I have little to offer that is novel. I may, however, observe that a considerable quantity of an ingredient of which the composition is a secret has been imported into the State by our enterprising fellow-citizen, Alexander Gordon, Esq., and is now undergoing the test of experience on a large scale on his plantation. It is afforded at a cheap rate, and if it succeed in replacing the lime which imparts so obstinate a yellow tint to our syrups, as its inventor feels confident that it will, another great step will have been made in our march of improvement towards the perfection of the manufacture.

The filtration of the syrup through bone black, next claims our attention. The use of animal charcoal has exercised an influence on the manufacture of sugar during the present century inferior to that of no other discovery, not excepting even Howard's invention of the vacuum pan. The only objection suggested to its use, viz: its cost, was obviated when Dumont showed by his filters that it was not necessary to employ it as a powder, which, when once used, ceased to have any value except as manure, and that if employed in grain its filtering and discoloring powers might be indefinitely prolonged by the process of revivification. Much talent and labor have been expended in devising the best means of economical and effective revivification, but I have heard of none so satisfactory as that by heated steam, which I saw employed on a very large scale at two refineries near Paris. The black is thrown into a heap after being used and allowed to ferment; it is then thrown into a cylinder, and steam heated to 750°. F., is driven through it. The steam is heated by being conveyed through pipes placed in a furnace so arranged as to heat them red-hot without the actual contact of the fire, which would otherwise soon destroy them, nor is this process at all attended with the danger which might be supposed to result from the great degree of heat imparted to the steam. The action on the bone black is at once to destroy, by combination all the organic matters absorbed into the pores of the charcoal during its use and the purgation of all impurities. The black when taken from the cylinder is simply sifted, and is found then to be fully equal to new black, and one of the refiners stated that he considered it as constantly improving by this process. This mode of revivification is cheap, simple, and superior to any with which I am acquainted. The proper degree of heat in the tubes is very simply indicated dy dropping on them a metalic alloy, which melts at 750 °. F. When the alloy begins to melt, the bone black is discharged, and a fresh charge introduced into the cylinder.

Here is one drawback to the use of animal charcoal, which I never have seen mentioned in any treatise on sugar, but which deserves some attention. Bone black absorbs out of its own weight of saccharine solutions a considerable quantity of sugar. In experiments in the laboratory a weight of saccharine solution equal to the weight of the black in the filtering tubes must first be passed through the black and then laid aside, and the subsequently filtered liquid is submitted to chemical tests: for the first liquid that passes through has lost a part of its sugar by the absorption of the black, and contains from five to ten per cent. less sugar than when poured into the filter. One Dumont filter contains generally from 2500 to 3500 pounds of bone black, and if one be filled afresh every day as is usual in our sugar-houses, the loss of sugar from this cause becomes worthy of some consideration, and some of the gentlemen of the Association who use the bone black filters may, perhaps, find leisure to make some accurate estimates on this subject by experiments on a large scale. I have not been able to do so myself, but shall take an early opportunity of satisfying my mind on the subject.

I shall now proceed to consider the subject of the concentration and crystalization of the syrup in connection with the mode of liquoring or refining the sugar by means of pneumatic boxes or *tigers*, as they are called. I am the more eager to address you on this part of the process, because justice to another requires it. In the report of Professor McCulloh will be found the following passage:

-Liquoring may be performed in pneumatic pans or *tigers*, but there is some difficulty experienced in the operation in consequence of obstructions if it be urged very rapidly. If at first the syrup be allowed to act simply by its own gravity, then the filtration be gently accelerated by a feeble partial vacuum, until it shall have drained freely, and finally, the air be drawn through the mass to remove syrup adhering to the crystals. I do not doubt that no difficulty will be experienced with pneumatic pans, especially if the operation be performed at a temperature of not less than 80 °. F.

-When I was in Louisiana. Messrs. Benjamin and Packwood had tried unsuccessfully to overcome the above mentioned difficulty of obstruction; they have since succeeded entirely, and their present crop has been manfactured with Rillieux's apparatus and pneumatic pans, into liquid sugar of perfect quality. A specimen of this sugar presented to me by Messrs. Merrick and Towne has been analyzed by me and found *chemically pure*. Its crystalline grain and snowy whiteness are also equal to those of the best double-refined sugar of our northern refineries. To Messrs. *Benjamin* and Packwood must, therefore, *be awarded the merit of having* first made directly from a vegetable juice, sugar of absolute chemical purity, combined with perfection of chrystal and color. This is indeed a proud triumph in the progress of the sugar industry. In the whole range of the chemical arts, I am not aware of another instance in which a perfect result is in like manner obtained immediately."

This is high praise, gentlemen, and comes from a high source, and I am, therefore, the more mortified in not being able to take my share of it. I believe it to be true, as stated by the Professor, that although the *tigers* had been successfully used in liquoring sugar already made, they never had been employed in receiving the liquid sugar as it runs from the battery and converting it into chrystals, until the experiment was made on the Beluchasse plantation, belonging to Mr. Packwood and myself: but the success of that experiment is to be attributed alone to my friend and partner Theodore J. Packwood, and I have no hesitation in saying, that any man not possessed to the full degree of his indomitable perseverance, long experience, and intimate knowledge of the behavior of saccharine matter under all the influences of temperature and varieties of manipulation to which it can be subjected, would have abandoned the experiment in despair, as being utterly hopeless. It was only after weeks of severe toil and intense application, that there appeared any prospect of ultimate success, and more than three-fourths of the first crop made with the tigers had been taken off before they were worked with that steady precision which proved that they could as surely be relied on in the manufacture of sugar as the ordinary moulds of the refiner.

I have stated that I would treat of the concentration of the syrups and crystalization of the sugar in connection with the working of the tigers, because it is only in that connection that I can offer you any remarks not to be found in all the treaties on the subject. It was well remarked by your distinguished Vice President, Judge Rost, in his interesting address, delivered to the association in 1845, that the vacuum pan has many decided advantages over all other concentrating vessels: that the sugar may be grained in the pan and that the granulation is completely under the control of the operator, who may accelerate or retard it at pleasure: who may carry it so far that sugar will not run from the pan, and may so conduct it as to increase almost at will the size and hardness of the crystals. All this is true; and it is also true, as he has stated, that the tigers cannot be used for sugar boiled in any other manner than in the vacuum pan. Allow me, then, to explain to you in what manner the tigers are constructed, how the sugars are to be boiled for being worked in them, and the mode of conducting the operation afterwards.

The pneumatic pan or tiger is an oblong box divided into two parts. A convenient size has been found to be eight feet in length and four feet in width. The two parts of the tiger are divided by a frame covered with cloth, made of copper wire, which forms a false bottom; the lower half is of cast iron and is about twelve inches in depth, with a slope from all sides towards the centre, at which point is a cock for draining off molasses from the sugar which is poured into the upper part and which is drained through the seive-like false bottom above alluded to. The upper parts is about sixteen inches in depth.

it is made of sheet iron or wood, with a ledge of about half an inch in width, running all round the inside at the line or junction with the lower half; this ledge serves as the support for the frame, which is also supported from beneath with a thin plank, set on edge, and running from end to end of the tiger: the lower part of this plank is scooped out in two or three places, so as to leave free passage for the drainage from all parts of the bottom to the cock at the centre. An opening in the false bottom is connected by a valve with a pipe running to the air pump that is worked by the engine that drives the mill, and another small opening connects with a steam pipe furnished with a cock by which the steam can be admitted, or shut off, at pleasure, and the use of which will be presently noticed.

The theory of the working of the tigers is seductive, from its exceeding simplicity. The pressure of the atmosphere being calculated at fifteen pounds to the square inch, if sugar be placed on the upper part of the tiger, and a vacuum created beneath the false bottom by pumping out the air every square inch of the surface of the sugar is pressed in by a weight of fifteen pounds, which is sufficient to drive through the false bottom all that is liquid in the mass, and thus leave the pure crystals above, they being too large and too hard to be forced through the meshes of the wire. In practice very great difficulties occurred: if the sugar was boiled *high*, as the sugar makers term it, the syrup became so viscid as to adhere to the crystals, and the pressure of the atmosphere instead of driving it through, had the effect of compressing the whole mass into one solid body, as hard as a loaf of refined sugar, and which could only be removed from the tiger by the aid of pick axes and hatchets, requiring immense labor and tearing to pieces the wire cloth, which is expensive. If the sugar was boiled *light*, as it is termed, nearly the whole battery would run through the false bottom, when the vacuum pan was discharged and the operation thus conducted would clearly be not profitable. It is, therefore, evident that the mode of boiling or crystallising the sugar in the vacuum pan is the most essential point for consideration as regards the liquoring in the tigers, and that this process can only succeed by obtaining from the battery a mass, composed of firm and large crystals floating as it were in a light and fluid syrup. This object can only be attained by great art in the sugar-boiler, and the mode of so doing is an application of the principles of crystallisation, which you will find stated with admirable clearness by Professor McCulloh, in his report. A description of the process would carry me too far, but I may state generally that the syrup is to be evaporated in successive portions, so that the crystals of each portion may form *nuclei*, which are successively enlarged at each fresh charge of syrup introduced into the pan: these successive charges of syrup are always small, and the fluidity of the mother-liquor of the crystals is preserved by the changes of temperature and destiny being kept moderate; whereas a rapid evaporation in mass of the syrup would be attended by a violent agitation, an absence of *nuclei* around which large crystals could form, and the result would be a small and confused grain totally unsuited for working in the tigers.

The sugar, when boiled to the proper point, flows from the pan into the tiger in a thick mass, composed of crystals floating in a fluid syrup, and being boiled at a low temperature, cools so rapidly that it frequently requires the assistance of the workmen to scrape it along the trough and accelerate its passage towards the tigers, unless the fall from the pan towards them is very precipitous. When received into the tigers it is allowed to cool for a few hours, during which time it has become thoroughly crystallised, the mother-liquor of chrystallisation has passed through the bottom and the whole mass is then as well purged as sugars made in the open kettles are, after remaining a fortnight in the purgeries. The surface is then removed and mixed with water so as to form a thick paste, such as refiners call a *magma*, and is again spread on the top of the tiger, which is allowed to drain for three or four hours—at the end of that time it presents a color equal to the inferior grades of white Havana sugar, but the crystal is larger and more beautiful. White syrup is then poured on it and the air pump is applied, which forces the syrup through: the syrup in its passage displaces the last pellicle of coloring matter that still adheres to the surface of the crystals and leaves the sugar perfectly white: the action of the air pump is continued for the purpose of drying the sugar in a measure, and at the end of twenty-four hours from the time when the battery was poured into the tiger it is shovelled out in perfectly pure white crystals, and thrown on the floor of a room heated by steam pipes, where the little remaining moisture is evaporated, and the sugar is then ready for market—the entire process, including the putting it into packages, requiring a period of less than forty-eight hours.

After the tigers have been used three or four times the meshes in the false bottom become clogged by the small crystals that are forced into them, and the steam is then let under the false bottom through the pipe before described; it melts these crystals, and with a brush, the workman in a few minutes has the bottom so cleaned as to be ready to receive a fresh battery. This pipe is also serviceable when through a mistake of the boiler the crystalization has been improperly conducted and a crust forms in the bottom; the steam may be used to loosen it, and thus avoid injury to the wire cloth.

Notwithstanding the perfection of the results obtained by this mode of liquoring and drying sugar, gentlemen, it is not to be recommended for adodption by any one who is unable to give to it his personal superintendence or to procure the services of an intelligent and attentive agent. It requires constant care and watchfulness, and any mistake in boiling the sugar. whether arising from ignorance or inattention, causes much trouble and labor. Sugar made from frosted or fermented canes, or from the unripe cane which is frequently cut from new ground, or from from land freshly manured by a crop of peas, could scarcely be worked in them at all, and in all such cases we have found it more profitable to put the sugar into hogsheads and allow it to drain in the purgery, in the usual mode. . But when the cane-juice is pure and sound and from ripe cane. I have seen nothing equal to the beauty and economy of the process, when conducted with skill and care.

There are several other subjects, gentlemen, connected with our rsuits on which I had intended to touch, but I feel myself in danger exceeding by far the limits usual on such occasions. and shall only rert to one more topic before closing this address.

The annual recurrence of early frosts for some time past, has occaoned much solicitude about the preservation of the cane, particularly the higher latitude of the State, where the result of its cultivation s equalled the most sanguine anticipations of the enterprising genmen who have undertaken it. Experience has not yet demonstrated ether the severity of the cold is such as to destroy the germs remaing in the stubble, and thus create the necessity for renewing the plantg every year, which would indeed prove a most serious drawback. ut such inquiry having been awakened on the subject of winrowing e cane, I have thought you would feel interested in a fact which has ference to the subject, and which occurred at my own residence. bout one-fourth of an acre of plant cane of the Creole variety was fected by the frost on the 20th November, 1846. The lower joints emained sound, but the upper part of the cane, about two-thirds in ngth of the entire stem, was sufficiently injured for all the eyes to be illed. The cane was in the garden and was winrowed two days fterwards, and from causes not worth mentioning, remained in the inrow untouched till the beginning of April. It was then taken up, nd to my great surprise, was still sweet and sound. The frozen eyes had dried up into a black dust, which filled the cavity where each eye had been formed, but the injury was there arrested, the remainder of the joint had not fermented, and there can be no question that the cane would have made good sugar. This is an isolated fact, and I give it nly for what it is worth; but when we consider that the plant Creole ane is the most tender of all, and that its leaves form a much less perfect covering in the winrow than the broad leafy tops of the riband ane, there is certainly reason to believe, that if cane be always winowed in the state above mentioned, (and the first frosts rarely affect it more.) there would be no danger of loss of crops, and the injury nflicted by the frost would be confined to the extra labor which the inrowing requires, and a somewhat diminished yield by means of the artial drying of the cane.

In conclusion, gentlemen, allow me to pay the well merited tribute f respect due to your Association. It is to your efforts that is mainly o be attributed that spirit of enquiry, which has lately aroused the griculturists of the State from the lethargy into which for so many ears they had sunk.

On all sides evidences of improvement are becoming conspicuous; nd. although much still remains to be done, although in many maters our culture and manufacture are still in their infancy, yet no long eriod shall elapse ere you will witness with pride and pleasure, the rogress which you have stimulated into active development, and will el that you have the right to make that boast which is the proudest riumph of the modern patriot, as it was of the ancient Roman, that ou have deserved well of your country.

Art. VII.—THE SCIENCE OF HISTORY.

Introduction to the History of Philosophy, by Victor Cousin, Professor of Philosophy, of the Faculty of Literature of Paris. Translated from the French by Henry Gotfried Linberg. Boston: Hilliard, Gray, Little & Wilkins. 1832.

For something more than two hundred years, that is, since the year of Grace 1637—the year in which was first published Descartes' celebrated work "*De la Method*" (concerning method)—there has been gradually maturing upon the continent of Europe, and as far as the rest of the world was concerned almost silently so, a new school of philosophy which, by the application of its principles to History, promises to add a rich contribution to the general fund of human knowledge. It is, too, a contribution which, in these days of scientific discoveries, is not only much needed, but is in good taste and in admirable keeping with the times. In effect, if this new philosopy shall be found able to withstand the test of close scrutiny and severe analysis which that relentless and infallible arbiter of systems, Time, never fails to apply, it will do nothing less than lift up History from its present humble condition, and erect it into a *pure science.*

It would seem, by the caption of this article, that we have ventured to anticipate the rendition of this judgment, and to declare in advance that History is already a science. It is not we who make this declaration; it is the philosophy, of which Mr. Cousin, in the work before us, is one of the most able expounders, that invests History with the sublime attributes, and has dignified it with the lofty title of a *positive science.* It rests with this philosophy to vindicate its own claims to universal acceptance, before that tribunal which alone is competent to decide upon their validity; and for this purpose it has enlisted many able advocates in its cause. If, we repeat, those claims shall be found valid, History, in common with many other branches of human knowledge hitherto, like it, deemed lawless and arbitrary, will thereby reap immense profit; the complex phenomenon of human societies will be exposed and better understood; and unity, philosophical efficiency, and a common relationship between the various physical and natural sciences, will be established; for it cannot but strike forcibly all reflecting minds, that those sciences, known among us by the designation of positive or exact, on account of the peculiar method of their development, have hitherto revolved in separate and distinct orbits, each being developed by itself apart from the rest, owning no kindred sympathy and no community of principles and laws; the principles and laws of one differing, perhaps, after all, from the others, more in their technical phraseologies and in their external manifestations or forms, than in their intrinsic natures. This is a matter then which concerns all mankind, and it is of the highest magnitude to their interests that a speedy decision be had in the premises. The speediest and most effectual method of arriving at this judgment, which shall be final and decisive, is by publishing it to the world for discussion, and by making that publicity and that discussion as wide and general as possible.

This subject, all important as it is, and much as it has agitated the

ible mind on the continent of Europe, where it originated and where
s discussion and development are mainly confined, has as yet ob-
ined but little attention in this country, and still less, we believe, in
ngland where the utmost incredulity is entertained or affected in
spect of the truth of its doctrines, or indeed of the practicability
arriving at any truth at all in such matters as it professes to
scuss. In despite, however, of the attempt which, by their silence
d indifference, as well as by their words when they conde-
ended to break their silence, these two great and intelligent nations
press for this "Continental School of Philosophy," as by way of
stinction it has been called, yet we are not aware it has declined, or
s exhibited any symptoms of declension, in interest among the
rench and German people, who claim to be its progenitors or at the
ast its sponsors, and who therefore cling to it with all that fondness
d pertinacious love so peculiar to the sentiment of paternity. In
uth, the persons who have mainly contributed towards such develop-
ent as it has at present reached, must unquestionably be classed
mong the brightest intellects, the ripest scholars, the profoundest
hinkers, the most logical reasoners and polished writers the world
ver knew. In Germany, it claims for its patrons and expounders,
mongst a host of other illustrious names, such men as Spinoza, Kant,
Fichte, Schelling, Hegel, and Schlegel; In France, Descartes, Condillac,
Collard, Cousin, Jouffroy, Michellet, and in the same category we hope
we may also be permitted to rank her most distinguished statesman,
Guizot, have divided the empire of thought; in Italy, Vico more than
a hundred years ago wrote his famous work, just now beginning to at-
tract much attention, which he styled *Nova Scienza* (new science,) the
object of which was to give a universal history of humanity according
to philosophical principles, and without which the philosophy of history
could be studied to great disadvantage; Bossuet also, in France, pre-
ceded Vico in the same design; and Herder, in Germany, we believe,
closes the list of philosophical historians. There are many other names
equally illustrious that might be mentioned, but these will suffice to
show how difficult it would be for any other branch of human know-
ledge to display a more brilliant galaxy of towering minds for its ex-
pounders and defenders. Assuredly this of itself is a high recommen-
dation. Upon this score alone the Continental School of Philosophy
commends itself to our favorable consideration. To treat with super-
cilious contempt, and to reject without the courtesy of examination,
the common product of the most brilliant intellectual luminaries of the
human race, is no proof of superior sagacity. Such conduct, indeed,
might with more propriety be set down to account of superior dullness,
or an inability or disinclination to enter upon the investigation of a
theme requiring the exercise of the highest faculties of the mind, and
demanding a vast amount of patient labor, profound erudition and
deep research. Until England and the United States can offer to the
world something better on the same subject, and endorse it by more
responsible names, it is due to their credit as co-laborers in the cause of
science, at least to entertain this philosophy with decent respect, to
apply to it the scalpel of a genuine *criticism*, to dissect and analyze its
character, *and afterwards to shape their* conduct towards it accordingly.

It is by no means rational to suppose that History must always remain a series of incoherent words, succeeding each other in an order we know not why; a confused jumble of facts; a mass of disjointed members; a simple chronology, *a posteriori*, expressing no intelligible idea or definite meaning as a whole. Rather is it not desirable, and is it not time, that history should come forth from the chronicle, and reach its genuine form? Precisely one of the great practical uses to which this philosophy is designed to be applied, is to give to the facts of human history a scientific exposition and arrangement, and to erect history itself into a positive science analogous to the science of astronomy and the other physical sciences.

The actions of mankind, whether in the capacity of nations or of individuals, as they are presented to us in chronicles and records under the denomination of history, have the appearance of being purely arbitrary, accidental, and as it were, vagrant. They seem to have acknowledged no fixed law of occurrence and recurrence, but to constitute a mass of indigested and indigestible materials, chronologically arranged, to be conned by rote, and to demand from the student the exercise of no higher faculty of the mind than that of memory. The only useful purpose to which history thus written has ever been attempted to be applied, or indeed to which it has been susceptible of application, has been simply as a code of morals teaching by examples. In the discharge of this office it has been twisted and distorted a thousand ways, and been made to bend to a thousand constructions, the same event serving alternately as precedent and warning. So that, in this capacity, it has enacted the parable of the blind leading the blind, and has been more frequently mischievous than beneficial. Indeed, to this lamentable condition history has hitherto been unavoidably subjected. A sufficient number of facts must be collected before a science can result. In times past the world was not old enough, humanity had not witnessed enough of its own acts to be enabled to deduce from them those immutable laws which were ever influencing the conduct of its members, individually and collectively, unconsciously to themselves, and as it were, in despite of themselves. It was necessary that men should first detect within the life of humanity the existence of a plan, which was gradually unfolding itself from out of its acts, before they could write a systemmatic history detaling this plan; and much time was needed, before the human race could even suspect the existence of a plan, amidst all the mobility which appears in the events of this world. It was necessary that the appearance and disappearance of many empires, many religions, and many systems should have been witnessed, before men could think of comparing them, and of elevating their minds to the contemplation of the general laws which engender and govern them. It was necessary that mankind should have outlived many revolutions, and many instances of *apparent* disorder, before they could learn to comprehend, that all such instances of disorder are in reality only *apparent*, and that on high, there exists an order, at once invariable and beneficent; which is continually manifesting itself amidst the confusion which appears to reign here below, which extracts light of out darkness, which is ever and forever triumphant amid the rise and fall of empires, systems, and religions, and will still continue to preside over the wreck of matter and the crush of worlds.

Viewed, then, as a vast collection of facts in the plastic hands of the philosopher, out of which he is to extract the grandest science that has yet blessed the world, history comes to be a rich mine of inestimable value; and in truth it is herein, precisely consists the science hitherto rendered by history. In arresting and daguerreotyping the actions of mankind, as they passed in ever-shifting and varying processions before it, history was indeed most beneficently employed. The time has now arrived when its labors are doubtless about to be crowned with their appropriate fruit. The materials already accumulated are deemed ample enough to yield up to the philosopher a portion at least of those immutable, eternal, and irresistible laws which are supposed to reside at the bottom of social phenomena, and which regulate their motions and compel their accomplishment. It is this important truth which the Continental School of Philosophy recognizes. According to its doctrines, the past has been a preparation for the present; the present is in like manner preparing the future; and the future is agitating and vivifying the present. It declares that the whole series of phenomena that have transpired since the birth of humanity, or that are yet to transpire, succeed each other in an order neither arbitrary nor fortuitous, but in obedience to law as determinate as those which govern the planetary system, or the vegetable and mineral kingdoms, or any other system of nature; and it professes furthermore to determine the law of the succession. In its action it is perspective as well as retrospective—it looks to the future as well as to the past—it tells not only what has been, and why it has been so, and not otherwise, but with equal facility it foretells what is to be, and why it will be, just as astronomy is able to determine the exact state of the heavens at the remotest periods, past as well as future.

And now the question naturally suggests itself, Is this practicable? Is it possible? Can it be done? The philosophers say it can. One of them, Mr. Cousin, is now upon the stand—we will interrogate him. Perhaps hereafter we will call up other witnesses; for they seem not all to testify alike, although they in some degree concur as to the general result which we have announced. This author has been selected in preference to any other member of the fraternity, of which there is a goodly number, and this particular work of his in preference to any other of his writings, for good and sufficient reasons. Mr. Cousin stands professedly at the head of his class, and is the founder of the school of Eclectic philosophy, which for sometime past has been exciting no inconsiderable stir in France and elsewhere. In his hands eclecticism is in some sort a resume of all the different philosophical doctrines that have agitated the European mind since the days of Descartes and Bacon. It absorbs within its capacious bosom all those conflicting systems, and reproduces them in an amalgamated and agglomerated totality, rectified, purified, and refined, and somewhat accreted by additions made to it of the peculiar views of its author In his system of eclecticism, Mr. Cousin professes to despise nothing, to profit by every thing, to shun *all that in himself* is exclusive, but to comprehend *and to forgive it in others*, to accept of all and to combine all; to strive to reach that which is universal and complete, and to press forward towards it even through the most exclusive points of his predecessors and masters. Such is his aim, such is his method, in history as in philosophy and in all things.

We have thus given, as clearly and concisely as we know how, the notion we entertain in regard to Cousin's system of eclecticism. Such, however, is not exactly the point of view in which some of the more ardent admirers of this school would have it considered. It would seem that the founders of this system, or whoever has the christening of it, were unfortunate in their selection of a name. The vocable, from some cause, has become unpopular, either because it has been misunderstood or because it is really objectionable. The *name* of a philosophy is presumed to designate in some manner the innate and hidden character of its principles; for this reason, the unpopularity of the word "*eclecticism*," as applicable to a system of philosophy and as descriptive of its general character, has attached more or less discredit to the philosophy it embraces. Whether those who judge unfavorably of the eclectic school of philosophy have formed their estimate of it from a thorough examination of its principles, or have judged it on account of its name, we of course will not pretend to decide. It is, however, condemned by many upon the ground that two errors, or any number of errors combined, will not yet make a truth. For example: if sensualism and spiritualism separately, are false, their union will not make them true. Hence the friends of the system contend, that eclecticism means the contrary of a commingling of heterogeneous systems; being intended to designate a discriminating selection of the elements of truth which may be found in each system. This definition, in its turn, has also been objected to on the ground, that men will not accept a philosophy which, by reason of its title, they are given to understand beforehand, owes its claims to credence solely because it professes to arrive at truth by harmonizing opposite views and conflicting theories by selection and exclusion at will; because, they say, all men are not agreed as to what is true or what is false in any given system; that the very element which one would select as true might be excluded by another as false.

According to our view of the matter, the eclectic school does not consider either sensualism or spiritualism as in any respect false in themselves; on the contrary, it accepts them both as true in all their principles, widely divergent as they are from each other, and considers them as being falsified only when each, apart from the other, is mistaken for the whole truth, when in fact they are but dissevered parts of a whole; it avers that these two systems originally co-existed and dwelt peacably together in the vast frame of Carteseanism, such as Wolf left it; that so long as they remained thus enveloped in each other, neither could possibly show or know its true character: that in order to attain to their complete development, and to reveal all the hidden powers that were concealed in them, it was necessary that each of these philosophies should be developed in an exclusive manner; that for this purpose they were separated and placed in full contradiction with each other; hence the energetic and fruitful warfare with which they filled the latter part of the eighteenth century; that having thus arrived at maturity—having fully displayed all their energies—having exhibited all of which they were capable—and given to the world all that was contained in each respectively, it was deemed expedient that they should remain no longer separate and hostile: hence, eclecticism sets about to re-unite them; and, accordingly, in eclecticism they meet to reconcile their differences, to explain, illustrate, and verify each other.

For example: the sensual system originated in England, the country of Hobbes—a country well adapted, by reason of the genius of its people, to give birth to such a philosophy. The celebrated Locke was the first who expounded the principles of this system; and Locke was the legitimate successor of Hobbes, and admirably represented, in all the leading features of his mind, the aggregate character of his countryman. He it was, then, who first taught the doctine that all ideas are derived from sensation and reflection; in other words, that it is only by means of observation or experience, aided by reflection, that the mind can acquire or does acquire any knowledge whatsoever; and of course the physical senses are the only channels through which this knowledge is conveyed to the mind; hence the mind can only be the aggregation of sensations thus experienced, over which the spirit of reflection passes and fuses into union and harmony. If we will remember the "selfish system" of Hobbes, who preceded Locke, and whose partial and one-sided philosophy had long exercised deep and abiding influence over the English mind, and had prepared, as it were, the ground for the reception of seed afterwards to be planted there, we will be still more forcibly struck with the peculiar fitness of England to be the birthplace of a philosophy like that announced by Locke, and less astonished at the vigorous growth to which it attained under the fostering care of Hume. It did indeed acquire a luxuriance of growth which its original founder was very far from anticipating; and the bitter fruits it was made to bear were still less agreeable to his taste, or in accordance with his calculation. Locke was, in some respects, a true disciple of Descartes—and was the first, we believe, who introduced into English philosophy the Cartesian method of psychological analysis of human consciousness. But as Hobbes, before him, has disfigured and mutilated human nature by reducing all its acts, motives, impulses, and all morality, to "self-interest, well understood;" so in like manner Locke, entirely preoccupied with his favorite theory, that sensation and reflection are the only sources of knowledge, deformed and mutilated human consciousness, by overlooking the independent and spontaneous action of reason, and by excluding from the mind all those primary ideas, or first, truths, which are communicated spontaneously by the intuitive reason. For it is clear, that while much material for knowledge is communicated through the senses, there must pre-exist in the bosom of consciousness a machinery fitted to receive and to make use of it; that this machinery pre-exists there independently of the senses; and that, while working up the raw material supplied by observation, it must suggest by its own peculiar action ideas which could never have been derived from experience alone. It is this compound action of the mind which *Locke's philosophy overlooks*, considering as it does only the exterior element and neglecting entirely the interior elements, liberty and intelligence; thus denying utterly the impersonality of reason. This was indeed a pregnant error, as will presently be seen. In the meantime, we beg it to be understood we demonstrate nothing, we only designate; we advocate nothing, we only explain; for it is not our design to teach eclecticism, but to describe it.

No objection, as we understand, is taken to the fact that the elements of consciousness were thus separated; on the contrary, it is considered highly essential and necessary that they should have been so dissevered; because, in cases of great complexity like this, the workings of the combined whole can only be properly understood by disentangling the parts from each other, and analyzing each part by itself. It was quite natural that the exterior element should have been the first to have been seized hold of and disengaged from all connexion with the interior and more hidden element; because the former is more exposed to view, and therefore much more likely to be the first to arrest attention. Having once gotten possession of this exterior element; having for a long time directed attention exclusively to its consideration; and having at last discovered it to be so fertile and so full of resources as, indeed, it really is, it was also quite natural that its advocates, in the first moments of enthusiasm at so wonderful a discovery, should deem it omnipotent and should exclaim "*Eureka*," "I have found it." Accordingly, it was forthwith erected into the god of their idolatry, and at the "sound of cornet, flute, harp, sackbut, psaltery, and all kinds of music," the rest of mankind were expected to fall down and worship the image that had been set up in Dura.

[TO BE CONTINUED IN OUR NEXT.]

Art. VII.—CONTRIBUTIONS OF THE NAVY TO SCIENCE AND COMMERCE.

THE Association of American Geologists and Naturalists which convened during last summer in Boston, had under consideration a report prepared by Lt. M. F. Maury, of Washington, D. C., upon "The importance of the information which our public cruisers might collect with regard to the Gulf Stream, and other subjects of general interest." We have been favored by the author with a manuscript copy of this report, with the accompanying documents, charts, drawings, &c. The Association having from a want of funds, we believe, determined not to publish its valuable papers the present year, it has occurred to us that with great propriety we could present this to our readers. It discusses subjects with which commercial men should be familiar, and relates in an especial degree to the Gulf of Mexico, in which we have all so much interest. The remaining papers, &c. of Lieut. Maury, will appear in other numbers of our work; and we shall endeavor to furnish the charts, &c., if they can be obtained.—EDITOR.

THE GULF STREAM.—Observations should be particularly directed to the force and set of this stream, to the temperature of the air and water in it, as well at the surface as at various distances below; to the depth of the current itself, and to the temperature of the water in it, and on either side of it, both at and below the surface; to the fluctuations of the Gulf stream during gales from any quarter, especially those which cross or oppose it; to its depth, however great, and to the character of the bottom, specimens of which should be carefully preserved, being carefully labelled with position, date and depth at which they were obtained. In crossing and about the edges of the Gulf stream, should alternate streaks of cold and warm water be encountered, it would be very interesting to know their position, breadth, velocity, depth, &c.

With these objects of inquiry in view, it is important to have the Gulf stream *snaked* across from time to time, and as the other duties of the Home, or West India cruisers will admit, from the straits of Florida to the banks of New Foundland.

In order to ascertain the force and set of its current with the utmost accuracy, it is desirable that the vessels when so engaged, should sail free, establish by observations their position whenever practicable, at least once in every 10 or 12 miles distance, and oftener in light winds, and that they should steer as nearly by astronomical bearings as the weather will admit. For this purpose, the prismatic azimuth compass should be mounted on its tripod abaft the binnacle, and as near the centre of attraction from the surrounding guns and other ferruginous materials as possible; the variations should be obtained as often as practicable, and whenever the course is altered, and fresh comparisons made between the prismatic compass and the steering compass; which difference should be carefully noted or preserved as a guide, when, with similar headings astronomical observations cannot be had. Each foot of the tripod should have its mark on the deck, in which it should always be placed. In light winds and calms boats properly fitted should be lowered to try the current. For this purpose, they should be provided with a parachute made of canvass having weights attached to it, and so constructed that, when let down into the still water below the current, it may spread out, and by its resistance serve as an anchor. The velocity of the stream to the depth of several fathoms, may be readily ascertained by means of the yachometer and its direction on the surface, by a small log line or chip, or by one or more fishing lines tied together, and having small corks to float them and to guide the eye.

TEMPERATURE OF THE GULF STREAM AND UNDER CURRENTS.—The absence along our coasts of coraline and other marine formations or productions which are found in corresponding latitudes elsewhere, together with other circumstances which it is needless to name, seem to indicate the existence of counter currents of cold water, either at the surface or below it, which set from the northward towards the south: observations decisive of this question would be highly interesting and of great importance in their bearings upon ocean currents generally. With the aid of a very simple contrivance, well known to navigators. i. e. lowering a thermometer in a wooden cylinder with a valve opening upwards at each end, this fact may be satisfactorily established by carefully noting the temperature at various depths, both in and on each side of the Gulf stream. In order to ascertain the depth of the current in the Gulf stream, it is desirable to take the temperature at the *depth of every 10 or 15* fathoms, underlaying until the *cold stratum or the bottom be reached.*

Should an under current of cold water be any where detected along our coast, it is desirable that its limits, force and set should be ascertained as accurately as circumstances will allow.

There is thought to be a deep shoal about 120 miles to the southward of George's Bank. It is important to remove all doubts as to this question.

The configuration of the coast of Georgia seems to indicate that the course of the Gulf Stream in getting in the Florida channel, is not due north, as generally laid down on the charts, but that it is to the northward and westward.[*] If so, the fact is important to navigation, and will explain the paradox so often alluded to by navigators, viz: that the Gulf Stream runs with greater velocity off Cape Fear, or Hatteras, than it does directly after quitting the Florida channel. Each vessel should keep a careful record of the weather, the work performed—and at the end of each cruise to sea, forward an abstract of it, together with all the specimens and soundings, to the Navy Department, that they may be lodged in some convenient place, for final arrangement and future reference. The tracks of the vessel her, and her position at each observation, should be laid down upon the chart for her own guidance.

The approach to the coast of the United States in bad weather would be greatly facilitated, by ascertaining and establishing the line of deep sea soundings between it and the Gulf Stream. To establish this line for the whole coast, would be a work of time: but if every vessel, on leaving or making our principal harbors, were to run a line of deep-sea soundings, the informatien thus collected would, in a very short time, be found of vast importance to merchantmen.

Gulf Weed.—Its latitude and longitude, appearance, quantity, and a careful record of all facts calculated to throw light as to its place of growth and manner of growth

Sea Sargasso.—The position of its borders—the temperature of the water, in depth as well as at the surface. It would be particularly interesting to know the depth and character of the bottom of this part of the ocean.

Drift.—The place, appearance, &c., of any drift-wood, or other floating body, brought from the shore. Any information concerning a summer and winter level of the Gulf of Mexico—the quantity of drift-wood from the Mississippi lodged on the Tortugas and Key West, or carried out to sea—would be very valuable.

Icebergs.—Their appearance and locality—a full description of them, and of the debris with which they may be loaded—is at all times desirable.

North Pacific.—The attention of our cruisers visiting this ocean is particularly invited to any appearance or indication as to a stream of warm water from the China seas and their vicinity, towards the northwest coast of America—its general resemblance to the Gulf Stream—observations also as to the force and volume of a cold curent from the Polar basin through Bhering's Straits—or of a cold urrent within the tropics, towards Northern Asia and America—the xamination of deep sea temperatures about the equator, and the racing out of under-currents, wherever discovered—would be a subct of exceeding interest in theoretical navigation.

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[*] This fact has since been fully established, by Lieutenant Maury's "Wind and Current" chart, since constructed. It shows the set of the Gulf Stream to be to the west of north, as here suggested.

Storms.—The usual accounts as to their strength generally given in e log-book, with frequent barometric and other meteorological obrvations, during their continuance and immediately succeeding—cluding any remarks the officers may deem worthy of note—would tisfy this head.

The Abstract Log.—For the sake of embodying in a convenient d accessible shape the information here sought, it is respectfully ggested that an abstract log, something after the form herewith bmitted for your consideration, and annexed, be regularly kept 1 board each ship, and that all the officers, each under his own gnature, be invited to enter any remarks, or observations which he ay deem worthy of note. In stating the amount, or assuming the fference between the places of the ship, as per dead reckoning, and servation, care should be taken; first, to estimate the effect of leeay, bad steerage, heave of the sea, the allowances for which can best e made at the time and by the officers themselves. After making e allowance for these, if there still be a difference between the ckoning, this difference only should be entered in the abstract in the rrent column. It is greatly to be desired that nightly observations r the latitude, by the meridian altitude of the planets and stars, ould be regularly made, and sights for the chronometers should be ken regularly both A. M. and P. M., and the position of the ship corded each time. Streaks of warm and cold water, their limits and readth should always be noted. So also the latitude and longitude f any undue alteration in surface temperature. The importance d value of the abstract log would be enhanced still more, were it to ntain succinct accounts of the whaling grounds, of the geographical bitation of the different genera and species of fish—designating ose which are most esteemed at each place as an article of food; of e productions and geological features of islands and other places; of e formation of shoals, spits and bars; of latitudinal limits of coral; f genera and species of molusca, and all other marine productions; marks, particularly in volcanic regions, as to elevation in subsidence the shore line; rise and fall of tides; establishment of the ports; fect of gales upon the establishment of the port from actual servation; also the latitude and longitude of all places visited. For is last mentioned and highly important purpose, supposing the dinary instruments of navigation only to be on board, the observans for latitude should in all cases be made from the artifical horizon n North and South stars on the meridian, in preference to the sun; d for longitude by chronometer, upon equal altitudes of the sun in ference to the stars.

For the purpose of condensing the information entered on the stract log. the following symbols and abreviations are respectfully ggested, that every entry may be properly designated. They are e *more important, as many of them* are already agreed upon by navigators: **O**—lat. by meridian alt. of the sun; **)**—lat. by m alt. of the moon; —*—lat. by the stars; —**O**—lat. by doub tudes; —**C**— long. by chronometer; —**R**—lat. dead rec from the last observation; — **)**—long. by Lunars; —**D**—d reckoning since last observation; —30-600 deg.— temperat depth. Thus, such an entry would signify that the temp was 30 deg. at 600 fathoms.

0	Denotes a Calm.		
1	“	Light Airs—just sufficient to give steerage way.	
2	“	Light Breeze, with which a well-conditioned man of war under all sail and clean fall, would go in smooth water, from - - - - - -	1 to
3	“	Gentle Breeze, “ “ “	3 t
4	“	Moderate Breeze, “ “ “	5 t
5	“	Fresh Breeze, in which the same ship could just carry close hauled	Royals, &c.,
6	“	Strong Breeze, “ “	Single reefs and t.
7	“	Moderate Gale, “ “	Double reefs, jib,
8	“	Fresh Gale, “ “	Triple reefs, cours
9	“	Strong gale, “ “	Close reef and cou
10	“	Whole Galo, with which she could bear close reefed m. to reefed foresail.	
11	“	Storm, with which she would be reduced to storm staysails.	
12	“	Hurricane, to which she could show no canvass.	

b—	Denotes	Blue sky, whether with clear or hazy atmosphere.
d	“	Drizzling rain.
c	“	Cloudy, *i. e*: detached opening clouds.
f—	“	Fog—Thick fog.
g	“	Gloomy, dark weather.
h	“	Hail.
l	“	Lightning.
m	“	Misty or heavy—so as to intercept the view.
o	“	Overscast—the whole sky covered with one impervious clou
p	“	Passing showers.
q	“	Squally.
r	“	Rain—continuous rain.
s	“	Snow.
t	“	Thunder.
u	“	Ugly, threatening appearances in the weather.
v	“	Visibility in distant objects, whether the sky be cloudy or not
w	“	Wet with dew.

•.. .. .. Under any letter, denotes an extraordinary degree.

By the combination of these letters, all the ordinary phenomena of the may be recorded with certainty and brevity.

EXAMPLES.

bcm	Denotes	Blue sky with detached opening clouds, but heavy arc horizon.
gv	“	Gloomy, dark weather, but distant objects distinctly visibl
gpdlt	“	Very hard squalls, showers of drizzle accompanied by li and very heavy thunder.

☞ Not having the astronomical marks necessary to indicate with c what is intended to be conveyed by the signs used in the above article, *approximated* as nearly to the characters as possible. Ed.

Art. VIII.—NORTHERN LOUISIANA AND ARKANSAS.

RISH OF OUACHITA; MONROE, EL DORADO; CAMDEN; PRINCETON; LITTLE ROCK; HOT SPRINGS ARKANSAS; THE MAGNET CAVE; CHALYBEATE PRINGS; OIL-STONE QUARRIES OF ARKANSAS; FARMERSVILLE; DESCRIPTION OF THE HOT SPRINGS; SOCIETY, HEALTH, WATER, ETC., ETC.

HAVING made an excursion from Monroe through the northern rt of this State, to some sixty miles northwest of the "Hot Springs the Ouachita, I have been urged to send you my observations of e region through which I travelled, which, if you deem worthy of blication, may be of service to persons desirous of visiting the differt watering places in that section of the country.

My means of observation were necessarily very limited—but never ving met with a description of the route pursued, I have condensed em, trusting they may prove of some little value.

The northern part of Louisiana is almost a *terra incognita;* but e immense influx of a population generally in easy circumstances, destined soon to make its influence felt. It is at this time increasg in strength and numbers faster than any portion of the State. he parish of Ouachita, which about ten years since polled about 350 tes, has had detached from it the parishes of Carroll, Morehouse, nion, Jackson, and parts of Caldwell and Franklin—which in the gregate now poll about 1500 votes.

I left Monroe on the 31st May last, and travelled twenty-five miles n the east side of the Ouachita to the mouth of Bayou Bartholomew, ne of its principal tributaries. This stream is navigable for steamats upwards of 250 miles. Here I crossed the river to "Ouachita ity," a village of recent date, and the "landing" for the freight to nd from the parish of Union—its population yet small, is about eighty uls, but from its commanding situation, must soon be much greater.

The lands from Monroe to this point are rich alluvion, well cultivad. and with some of the finest plantations in the parish. The production is cotton and corn—yielding an average of 1500 lbs. of seed tton. or 35 bushels of corn per acre.

From Ouachita City to El Dorado, the distance is fifty miles—the ce of the country assumes an entirely different appearance, being ne hills. tolerably productive, and well watered by good springs: e growth of timber, principally red oak, hickory and dogwood; and e soil yields about 1000 lbs. seed cotton, or 35 bushels of corn, oats. Sweet and Irish potatoes are also successfully produced—and e road thus far good for carriages.

El Dorado, the county seat of Union county, Arkansas, is a new wn. handsomely laid out. There is being erected a spacious ick Courthouse—a good Seminary of learning—and several beautil private residences. The commerce of the place is very considerble. from its proximity to the Ouachita river. The population of the wn is nearly 400, and of the county about 9,000.

From the advantages to be derived from good schools, and the althy character of the *place, it will eventually* be one of the mos opulous *towns in the State.*

The population of the county 8 years since did not exceed 400!

From El Dorado to Camden, distant 35 miles—the road is good—the hills become more abrupt—the soil about the same as before described—and the production without change.. About eleven miles north of El Dorado is "Bayou Smackover"—a corruption of the French "Chemin Couvert." It is a large creek, not navigable, but has some rich lands on its borders.

CAMDEN, on a declivity of a high range of hills, and immediately on the west bank of the Ouachita river, is the county seat of Ouachita county, and is most tastefully built. Having been built in the woods, the citizens have left many of the original forest trees standing, which gives to it an agreeable appearance. Like all the towns above Monroe, it was commenced but a few years since, on the site formerly known as "Ecore a Fabre"—an ancient rendezvous of hunters, and the point to which produce was was wagoned from Washington and its environs. The commerce of this point is already nearly equal to that of Little Rock, and must, from its great advantages, soon outstrip it. It is nearly at the head of large steamboat navigation, and has some four or five such boats regularly in the trade, which have heretofore been barely sufficient, and this year will be enabled to perform all the carrying business.

Another cause of its importance as a shipping point, is the dangerous and uncertain navigation of Upper Red River. Already a great quantity of merchandise for Washington, 65 miles to the west, is brought here; and were the citizens to make a charcoal road over the swamp of the "Canies," intermediate between two creeks half way between the two towns, there is no doubt that a large portion of upper Red River would get its supplies by this route, as the navigation is generally open much earlier, and the difference in freight and insurance would nearly, if not quite pay for the land transportation. The road is good, with the exception of this obstacle, which, in its natural condition, is almost impassable in winter and spring. An outlay of a few hundred dollars would make it permanently good, and repay the expense a thousand-fold. Let the citizens of Camden do this, and I think it would be predicting but little to say, that Camden will be in a few years the largest town in the State of Arkansas. Its population is about 600.

At the distance of one half mile above Camden I crossed the river to the east side. For two miles the road passes through overflowed bottoms, which, if reclaimed, would prove to be very fertile. It then commences to run on the hills, which are not as high here as near Camden on the west side; here gravel makes its appearance. At the distance of thirty miles from the crossing is "PRINCETON," the county seat of Dallas county—a town of too recent date to have as yet made any great improvements—but being thirty miles from navigation it is not likely to improve with the gigantic strides of Camden. The soil although gravelly, is said to produce remarkably well, from 800 to 1000 lbs. seed cotton, or 40 bushels of corn to the acre.

From this town to the military road, (the great mail route from LITTLE ROCK to upper Red river) a distance of some forty-five miles the hills gradually become more broken and more gravelly, until with

three miles of the military road, where large masses of rock
make their appearance.

Little Rock to Washington, in Hempstead county, there is a
y line of stages running.

this to the Hot Springs, the distance is twenty-two miles,
hundred and seven miles from Monroe—the road good the
ate for carriages, and accommodations comfortable.

usly, however, to arriving at the Springs, I stopped at the
r Cove." This cove is a circular valley, having an area of
s square—the soil is of a rusty color, and not a pine is to be
in its limits, although surrounded by pine forests. At the
side is an extensive bed of magnetic iron ore or load-stone,
vers the surface of the ground for several acres. It varies in
that of a pea to 30 lbs. Its magnetic influence is such as to
he immediate vicinity from being surveyed by a compass, but
extend as far as is generally believed. I was assured by Dr.
Conway, a practical surveyor, who has surveyed large bodies
bout the Cove, that its influence does not affect the compass
g, from the centre, one mile in any direction. It is about two
m the Ouachita river, and seven from the highest point to
all streams can reach. This ore is said to yield 90 per cent.
cellent quality of iron.

Hot Springs" are situated in a valley about seven hundred
length, running north and south, and 70 yards wide. On
de is a high mountain; at the base of the eastern one runs
ring" creek, which empties in the Ouachita river, some five
iles south of this. Along the base of the latter mountain
Hot Springs, some thirty-five in number, the temperature of
found, after several trials at long intervals, never to exceed
F.; sometimes as low as 120 deg. F. The creek, until it arrives
Springs, is cold—but here the temperature is raised to about
in dry weather, and much less when rainy.

creek below, where it receives the hot water, are fish; and
the water never gets warmer than 112 deg., they appear to
he coolest places. There are none in any of the Springs as I
rd reported, nor could they there exist, for lizards or snakes
s accidentally fall in them and are almost instantly killed.

Springs have a great reputation for curing various diseases,
are efficacious only in rheumatic affections. For this, if per-
in, they are a certain cure. In pulmonary diseases, or other
they are said to be very injurious.

sual mode of using the bath is, to get under the douche (which
from some spring at sixty or one hundred feet distance cools
r to a bearable point.) remain one or two minutes, then shut
up in the "vapour room," which is nearly air-tight and imme-
ver one of the hottest springs; the temperature of the room,
losed, attains 130 deg.; here remain 10 to 20 minutes. As
you enter this room, the perspiration flows most profusely; but
tanding the great heat, the *skin feels* cool and pleasant. At
ration *of the time deemed necessary*, you again get in the bath
the douche in the adjoining room and "wash off" for a

few minutes, then with coarse towels continue rubbing until the perspiration is nearly checked. This operation is generally repeated during the day; and although one would presume that having been "steamed and perspired" so much, the natural consequence would be to be debilitated, yet many gain flesh and strength.

The best time of the year for invalids to resort to these waters is from 1st March to 1st July, and from 1st September to 1st January, the fall months having the reputation of being the most beneficial. July and August are not so well calculated to do any service—the valley being surrounded by mountains, it is a sultry place and productive, if too much bathing be resorted to, of fevers and chills.

Three miles to the east, and on one of the routes to Little Rock, (distant sixty miles) are the WHITTINGTON CHALYBEATE SPRINGS, or rather Spring, as there is but one. It affords a great volume of water —the waste water alone propelling a small grist mill. These waters are considered very beneficial to dyspeptics and persons otherwise debilitated. Mr. Whittington has arranged the premises very tastefully, having detached cottages, snugly built aad comfortable, with chimnies and galleries—the latter more in demand in the summer months. He has the best orchard of various descriptions of fruit I met with in my journey. Some of the native grape is cultivated, which exceeds any grape I ever saw for the quantity borne. The quality is not very good, but will bear a fair comparison with some imported, having high sounding names.

For the citizens of your city, who, after the severe labers of the commercial season feel the necessity of recruiting their strength, I know of no more eligible resort than this Spring. The air is bracing —society pleasant—scenery beautiful—game abundant, and being on the main stage route to Little Rock, and only some fifty miles distant, easy of access.

This is the centre of the *oil stone quarries*. There are some five or six in the immediate neighborhood which are worked to considerable profit; but on account of the want of proper polishing mills, the quantity sent to market is small. Some of these quarries produce grit as good as the best Turkey stone, but on account of the greater facility with which an inferior quality can be prepared for market, that is almost the only kind known.

The quarries appear to be inexhaustible, and will at some future day be worked by capitalists, in such quantities as to produce sufficient to supply the world. The grit varies in quality from the finest hone to the coarsest whetstone.

They have a uniform appearance, the laminar being vertical and varying in thickness from one-fourth of an inch to eight or ten inches. Getting them out in the proper shape is an easy operation; the principal expense being polishing. Good water power being abundant in the vicinity, mills will be erected on improved principles. There are now two for the purpose of polishing, but they are of the most primitive construction and very small.

These stones are waggoned to Little Rock at an expense of from one-half to three-fourths cents per pound, and thence to different parts

[TO BE CONTINUED IN OUR NEXT.]

MERCANTILE BIOGRAPHY, ETC.

I.—JACQUES CŒUR.

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In our department of Mercantile Biography it is intended hereafter to introduce, as far as possible, living or contemporary characters. The first of the series of these is now in preparation, but could not be obtained for the present number. It will include one of our leading SOUTHERN merchants, and will, we hope, be illustrated with an engraved portrait.

We have, in a previous number, referred casually to the celebrated French merchant CŒUR. A more detailed reference is called for, from the circumstance that an elaborate life has lately been published in London of this eminent man. From this and from an old biography, by Beawe, we make the following extracts:

JAMES CŒUR, Native of Bourges, was the son of a private merchant, he followed the profession of his father, but with such speedy and happy success, that an author assures us, he gained more alone than all the merchants of the kingdom together.

His commerce was extended in all the Mediteranean; he trafficked in Asia with the Turks or Persians, and the other subjects of the Sultans of Babylon, and in Africk with the Saracens.

It was by the city of Montpellier (which then was the only entrance of the kingdom on that side) that he carried on so great a trade; this also was the only reason that could render that city dear to James Cœur, with which he had not otherwise any other connection, and consequently this was the sole motive that could determine him to embellish it. After speaking of a fountain which he made, where his arms still remain, we shall enlarge a little on the common exchange of the merchants, known at Montpellier under the name of the Loge, which he built, that this building might have a remarkable conformity with the commerce of the city, as it is visible he never dreamt of undertaking the former but with the view of augmenting and facilitating the latter. This building, which still subsists, is solid and magnificent. What is admired above all are the *basso relievos* in medallions which ornamented the front, and which employ the vain curiosity of those who have yet the weakness to give into search after the philosopher's stone; these are to them so many enigmatical emblems under which they imagine that James Cœur has hid the mysteries of the grand work of which he had made use, as they pretend, to acquire his immense riches, which, notwithstanding, he only owed to trade, as Mr. Astruc believes.

His great riches, acquired by a way so lawful, and the probity with which he conducted his busidess having rendered him famous among foreigners and known at court, Charles VII called him to the Ministry and trusted to him the management of his finances, making him grand treasurer.

His elevation did not in the least interrupt his trade, but, on the contrary, served him to continue it with greater reputation and success; but then this generous merchant, whose heart was yet greater then his fortune, had the most noble views in his commerce, and preferring the interest of the State to his own, it was much more in his peculiar funds than the prince's exchequer that he found resources, not only to re-establish the kingdom—exhausted by a long war—but to enterprise against the ancient enemies of the French name and to reunite to the crown one of its finest and richest provinces which had been for a long time in the hands of the English.

In effect, very soon the armies were only raised and maintained at the expense of this disinterested minister. He advised the conquest of Normandy, and he alone was at almost all the charge. When he went in embassy to Rome, a fleet of twelve ships which accompanied him belonged to him entirely, and it was he that was at all the expense of fitting them out. In a word, after Charles had, as one may say, associated James Cœur in the government of the State, there was nothing in France that was great and considerable which was not supported by the credit of this sage and rich merchant and wherein he did not employ the better part of the great effects that arose to him from his trade. Mr. Astruc says: "his very disgrace, which it *appears he never* meritted, seemed to have rendered him *illustrious*."

It is true that the people, accustomed to fancy a mystery and prodigy in things that surprised them and were above their comprehension, reported that James Cœur owed his fortune to the secret of making gold, which always strikes the desire and despair of Chemists; but, it is truer that all the philosopher's stone of this fortunate and able merchant only consisted in his great trade; and that he knew no chemistry more proper to operate the transmutation of metals, than the immense traffick that furnished him with those rich merchandizes of which his storehouses were always full and which he exchanged with so much profit against gold and silver, that an ignorant and credulous populace attributed it to the perfection of the grand works which it imagined he had the good luck to find out.

It was the money of Jacques Cœur which enabled the French to profit by the genius and enthusiasm of Joan of Arc; and it was his honest sympathy and steady manly counsel which seem to have sustained the tender and brave heart of the noblest of royal mistresses, Agnes Sorel, in her efforts to save the king. On her death she selected him for her executor. He had sprung from the people, and raised himself, by successful commercial enterprise, to a level with the princes of his age. He found French commerce behind that of every other nation, and left it prosperous and increasing. Direct and speedy communication with the East seems to have been his great idea. Modern Europe is still contending for it. He had at one time in his employment three hundred factors; and the rest of the merchants of France, with the whole of those of Italy, are not supposed to have equalled this one man in the extent of their commercial dealings. And he proved worthy of his wealth by giving it noble uses. He raised three armies for Charles at his own cost; and he repaired and re-established in his office of Argentier, the deranged finances of the kingdom. But his weakness seems to have lain in the direction of personal magnificence and splendor, and to this we may trace his fall. He did not allow sufficiently for the prejudices of his age, and at last armed them for his ruin. He is described to have far transcended, in his personal attendance and equipment, the chiefs of the most illustrious families of France; and when Charles made his triumphal entry into Rouen, the merchant, Jacques Cœur, was seen by the side of Dunois, with arms and tunic precisely the same as his. His destruction was planned by a party of the nobles, and an indictment of all sorts of crimes preferred against him—among them, the charge of having poisoned Agnes Sorel. He narrowly escaped torture and death—and only this by confiscation of his treasures (which his judges divided among themselves) and perpetual banishment. The latter resolved itself ultimately into a sort of strict surveillance in a French convent, which he at last escaped by the fidelity of one of his agents, who had married his niece. He was again characteristically engaged in active pursuits, and begining life anew as the Pope's captain-general on the coast of Asia Minor, when illness siezed him in the Island of Scio. He left, in his death, another example of the world's treatment of its great benefactors.

In the course of twenty years Jacques Cœur had more commercial power than all the rest of the merchants of the Mediterranean put together. Three hundred of his agents resided at the different ports, not only of Europe, but of the East, and in all the nations contiguous to France. Every where his vessels were respected as though he had been a sovereign prince: they covered the seas wherever commerce was to be cultivated, and from farthest Asia they brought back cloths of gold and silk furs, arms, spices and ingots of gold and silver, still swelling his mighty stores, and filling Europe with surprise at his adventurous daring and his unparalleled perseverance. Like his great prototype, Cosmo de Medicis, who, from a simple merchant, became a supreme ruler, Jacques Cœur, the Medicis of Bourges, became illustrious and wealthy, and sailed long in the favorable breezes of fortune, admired, envied, feared and courted by all. His wealth gave rise to a proverb, long retained by the citizens of his native town: "As rich as Jacques Cœur" expressed all that could be conceived of prosperity and success. Popular tradition asserts that, so great was the profusion of the precious metals he possessed that his horses were *shod with silver*—a common reputation, even at the present day, enjoyed by persons of singular wealth. The adornment of Bourges, where he was born, was not one of the least projects of the great merchant; and having, with a large sum, purchased a considerable *tract of land in the* town, he began, in 1443, to build that magnificent mansion *which still remains* a noble relic of his taste and wealth.

II.—RESORT OF MERCHANTS—ROYAL EXCHANGE.

It is difficult to imagine a more interesting spot on the earth's surface than the London Royal Exchange. What has originated within its bounds, narrow as they are, has had a greater effect upon the concerns of humanity than the battle of Waterloo produced, or the Congress of Vienna decreed. The commerce which has been carried by the winds of heaven across every ocean into every shore, at the bidding of the merchants who daily throng its area and its piazzas, has done more to civilize mankind, extend knowledge, and promote happiness than all the councils of the church, all the labors of missionaries, and all the exertions of philanthropists. The assertion is not made irreverently, or without a proper sense of what is due to the zeal, or what has been accomplished by the labors of the pious and good. But it is the wings of *commercial* enterprise that bear the missionary to his distant and dangerous sphere of action, carries "the schoolmaster abroad," and facilitates the dissemination of religious truth, physical knowledge, and moral and political improvement. Surely, then, the place where the energetic and enlightened promoters of this commerce have principally assembled, where their plans have been matured, and from where their peaceful edicts have been issued, is an interesting one to the enlightened lover of his species, to the patriot who contemplates with pride the character of his countryman, the British merchant, and to the citizen of the world who rejoices in the advancement of his fellow man in knowledge, virtue, and happiness. From the days of the royal merchant, Sir Thomas Gresham and the reign of Elizabeth, to the days of the Barings and the Rothschilds and the reign of Victoria—a period of nearly three hundred years—has the small paved area of the Royal Exchange been the resort of the merchants of England, and the place where the merchants of every other country in the world having commercial relations with England—and what country has not?—"most do congregate." That man is not to be envied who can pay his first visit to such a place, so full of time honored recollections, without feeling that his foot treads no common ground; and that the wealth of nations and the well-being of his fellow men have been controlled and influenced by the deliberations of those whose feet have trod that ground during the three last preceding centuries. Suppose it possible that the Royal Exchange, with all its congregated inmates and all their concerns, should, on any given day, be blotted out of existence, where and what would be the commerce of the world? A watch with a broken main spring, a steam-engine with a bursted boiler, or a ship without its rudder, would be inadequate representatives of the commercial world without the Royal Exchange and the London Merchants.

But justly celebrated as these British merchants are for their wealth, their enterprise, their probity and their intelligence, and influential as they have long been, now are, and will long continue to be, through the exercise of these attributes, upon the mercantile interests of the world, there is yet a higher position in which they are to be contemplated. They are the conservators of peace, the nerves and arteries of a nation's power and a nation's wealth. From among them have arisen men of the purest patriotism and the loftiest public spirit—men who, like Walworth, have protected the Crown, and, like Bernard and Beckford, have dared the frowns of a sovereign in defending the rights of the people. From among the merchants of London may be selected men of eminence in every science, and the patrons of every art; men of literature and taste, of the loftiest Christian virtue, the most liberal and benevolent dispositions, and the most expanded philanthropy.

This praise of the English merchants is not rendered them in derogation of their brother merchants both in the old world and the new, but simply in connection with the place of their daily assemblage, and the association which a visit to that spot cannot fail to give rise to.

MONTHLY COMMERCIAL SUMMARY.

COMMERCE OF THE UNITED STATES FOR 1847: COMMERCE OF NEW YORK: IMPORTS AND EXPORTS: FINANCES OF NEW-YORK: COMMERCIAL EMBARRASSMENTS IN ENGLAND—PANIC AND *DISTRESS: GRAIN CROPS:* PRICES OF COTTON IN N. YORK, AND *DECLINE: COMMERCIAL PROSPECTS FOR* 1848.

Amid the most general prosperity the money market of the Northern cities, New York in particular, has undergone a severe pressure from artificial circumstances. When revulsion overtakes the market, gen because through the operation of a season of prosperity and general the accumulation of obligations maturing, exceed the available me charging them. At such times all bid high for money; those with capital get through and operators of lesser magnitude perish. Such ha by no means been the case in the United States during the past se amount of business transacted has been very large, more so than ever

For the year ending June 30, 1847, as compared with previous yea ness of the Union has been as follows:—

UNITED STATES IMPORTS AND EXPORTS.

IMPORTS.

Year.	*Specie.*	*Goods.*
1842,	$ 4,087,017	$ 96,075,070
1843,	22,320,335	42,433,464
1844,	5,820,449	102,615,606
1845,	4,070,239	113,184,325
1846,	3.778,132	117,913,665
1847,	24,121,289	122,424.349

EXPORTS.

Year.	*Specie.*	*For. Goods.*	*Domestic.*
1842,	$4,878,553	$8,013,739	$ 92,799,242
1843,	1,521,348	5,138,678	77,686,354
1844,	5,454,214	6,214,058	99,531,774
1845,	8,606,495	7,584,781	99,455,330
1846,	3,905,268	7,865,206	101,718,042
1847,	1,845,119	6,166,139	150,639,464

The export of domestic produce, mostly breadstuffs, has been fi larger than in either of the preceding years. The value of breadstu for 1847, $65,906,277 against $24,577,991 in 1846; an increase of The returns have been made mostly in specie, inasmuch as notwith low tariff was in operation for the first seven months, the quant imported increased but slightly. In the first two quarters of the however, there has been a larger portion of goods imported. Of the of specie imported, $23,844,002 will have been coined at the natio the year 1847; enhancing by so much the specie currency of the cou

The trade of the port of New York for the year ending Nov. 30, pleted the first year of the operation of the present tariff, has bee compared with the previous year:—

EXPORTS AND IMPORTS OF NEW YORK, YEAR ENDIN

IMPORTS.

Year.	*Specie.*	*Free Goods.*	*Dutiable.*	*Total.*
1846,	$ 762,679	$11,138,124	$57,567,005	$69,467,808
1847,	8,732,582	8,180,652	79,534,070	96,706,530
Decrease,		2,957,472		
Increase,	7,977,603		21,967,065	27,238,732

EXPORTS.

Year.	*Specie.*	*For. fr. g'ds.*	*Dutiable.*	*Domestic.*
1846,	$1,569,007	$789,741	$2,206,764	$30,259,144
1847,	3,262,592	769,121	1,530,187	47,860,086
Decrease,		20,620	676,577	
Increase,	1,693,585			17,600,942

This has been a large business; the aggregate imports and exports being 128,516. The largest business ever done in one year before, was in 1836, the amount was $147,174,054. The exports are larger by thirty per cent. ever before. It is observable that the excess of specie imported is $5,469,690 the year. In this state of affairs, where so large an amount of business was transacted, it followed that the amount of banking would also be large, inasmuch as the custom continues to carry a large portion of the paper of individuals through the hands of corporations. It is, however, the case, that where that paper is confined to actual business, that is, where every note represents a commodity, the sale of which will liquidate the note, money can never be scarce; on the other hand, it must continually become more abundant, particularly when applied to a Profitable export trade. The progress of banking as expressed in the quarterly reports of the New York banks, has been during the two years, as follows:—

BANKS OF NEW YORK.

Date.	*Loans.*	*Specie.*	*Circulation.*	*Deposites.*
November, 1845, - -	$74,780,435	$ 8,884,545	$21,375,369	$31,773,961
February, 1846, - - -	71,897,580	8,361,383	20,926,330	29,654,401
May, " - - -	72,583,431	8,171,624	20,816,492	30,868,377
August, " - - - -	68,652,486	8,673,309	17,886,486	23,110,553
November, " - - -	71,950,191	8,048,384	22,268,522	30,629,196
February, 1847, - - -	70,087,342	9,203,242	21,166,250	31,931,770
May, " - - -	76,688,553	11,312,171	23,809,663	35,799,954
August, " - - - -	80,741,677	11,983,124	25,091,687	36,781,080
November, " - - -	80,258,529	9,107,920	26,237,256	35,096,318

The banking movement in August, 1847, reached a magnitude never before attained, exceeding the expansion of 1836, which ended in suspension. From August to November there was no apparent change in the aggregate loans; but in that period the city banks reduced their discounts, and the country banks, as usual at that season, expanded to meet the wants of the new crops. If we take a table of the quarterly exports for the quarters corresponding with the bank returns, we have results as follows:

IMPORTS AND EXPORTS OF NEW YORK, AND BANK LOANS.

Quarter ending	*Imports.*	*Exports.*	*Total.*
January, 31, 1846, - - - - - -	$12,260,560	$ 8,009,638	$20,270,198
April. 30, " - - - - - -	21,002,400	6,711,023	27,713,423
July 31, " - - - - - -	17,537,761	10,296,093	27,853,854
October 31, " - - - - - -	18,141,175	9,102,403	27,243,578
January 31, 1847, - - - - - -	14,374,444	11,354,376	25,728,818
April 30, " - - - - - -	29,309,294	11,648,579	40,957,873
July 31, " - - - - - -	22,678,392	17,753,495	40,431,887
October 31, " - - - - -	27,863,433	12,325,220	40,188,653

Quarter ending,	*Bank loans.*	*Specie Im.*	*Specie Ex.*	*Specie in bank*
January 31, 1846, - - -	$71,897,580	$ 149,547	$ 259,094	$ 8,361,383
April 30, " - - - -	72,583,431	265,548	904,080	8,171,624
July 31. " - - - -	68,652,486	111,287	371,504	8,673,309
October 31. " - - - -	71,950,191	124,735	130,194	8,048,384
January 31. 1847, - - -	70,087,342	291,612	81,409	9,203,242
April 30, " - - - -	76,688,553	5,961,644	321,435	11,312,171
July 31. " - - -	80,740,679	2,168,729	320,000	11,983,124
October 31, " - - - -	80,258,529	390,874	1,091,423	9,107,920

This table gives the business of the port with the bank movement of the State; and it is observable, that during the past year, the rise in the line of discounts from Jan. to August, was $10,000,000 against an increase of $15,000,000 in the aggregate business for the quarter. In the preceding year, although in the corresponding period the business increased $7,000,000 the line of discounts fell

$3,000,000, the Mexican war having supervened to caution the banks and cause them to curtail in anticipation of the usual export of specie at the close of the year when bills become exhausted. This year, the import of specie in the early part of the year was considerable, but the large arrival of goods operating through the custom house, kept up an important demand for specie for duties; and the amount held by the banks at the close of the quarter did not increase in the ratio of the import. Bills were then so low both at New York and New Orleans, by reason of the large exports of produce, that the importers of specie, by issuing paper in payment of bills, created a considerable demand for bank facilities, to be met on the arrival of the metals. As the season progressed and imports of goods increased, while revulsion in England depressed the prices of produce, the demand for bills raised the rates, and the import of specie was checked. The continuance of the reverses in England produced an anomaly in the exchanges which never before presented itself to so formidable a magnitude. It is evident, that under the system of exchange which has prevailed between the United States and England, viz: of always drawing upon England without any *counter exchange*, the availability of the exports depends upon the credit of the consignees. This plan has grown out of the fact that capital was abundant in England and less so in the U. States. The shipper of goods in this country, at the time of forwarding an invoice and bill of lading, draws a bill for a portion or all the amount of the invoice, as the case may be. The bill is usually at sixty days' sight and accepted by the drawee on the receipt of the invoice and bill of lading: thus, bills for the whole amount of shipments are running simultaneously upon England, and form *a currency* in which the goods bought of her are paid for. Goods are bought in England either for cash or two to six months credit. The invoice and bill of lading are forwarded with the goods, but the amount of the bill is never drawn for from England; parties there accept notes at a certain date, with the understanding that the remittance shall be forthcoming in time to meet these notes. The importer of the goods here goes into market and buys the bills drawn against produce, remits these bills to the acceptor of notes there, who gets them discounted and applies the proceeds to the notes he has accepted on account of his American correspondent for English goods. The international currency is here the bills drawn in the United States on England. It is evident, that if these bills become discredited, the effect is the temporary loss of all the produce shipped for eighty days, or during the space required for maturing and payment of the bills. This is what has taken place in the last ninety days. The packet of the 4th of August brought advices of an awful panic in London and the failure of many produce houses, some of them connected with the United States. The first effect of this news was to startle those who had purchased bills on that class of persons supposed to be affected by the panic, and they duplicated their bills on better firms to cover the previous remittances. By these means, an extra demand for money was brought about and a rise in bills took place. Packet after packet continued to arrive, each bringing more disastrous and gloomier prospects than that which preceded it. The revulsion gradually changed its aspect; from being the failure of a few corn houses, resulting as was supposed, from the reaction in prices, it became apparent that the cause was general involving all classes of dealers and all grades of mercantile standing; in fact, that the capital of England was exhausted. The losses by bad crops and the unparalleled absorption in railroads, had reduced commerce and mercantile operations to such extremities that the railroads only could obtain means, and the failures became almost universal in locality and character. As this state of affairs developed itself, it became evident that all drawn bills encountered the danger in a greater or less degree, of non-payment: hence, remitters shunned them, and preferred even at greater expense to send coin. For this purpose, heavy sovereigns were mostly selected, and as high as $4 87,1-2 were paid for them, equal to 110 premium for bills, when bills were at four per cent. in New Orleans, with sight on New York at one per cent. discount, equal to a rate for sterling of 5,1-4 per cent. with brokerage in New York. Although the remitters became thus cautious in respect of exchange, the New York banks do not seem to have taken any steps to provide for the state of affairs which a continued export of specie would necessarily bring about, we find their line of discounts as high Nov. 1, after three months of anxiety on the part of dealers, as it was Aug. 1. They *had taken no steps to prepare the public for more limited accommodation, although their specie* had declined $2,875,201. The steamer from Boston as well

ets from New York of Nov.1, carried a considerable amount of specie.
tions then became suddenly alarmed, refused rigorously all accom-
un each other for specie balances, and as far as in them lay promoted
oney has since continued exceedingly tight, and during the worst of
could not be obtained but on very high terms. First class commer-
old as high as two per cent. a month, and 1,1-4 per cent. a month was
w York stocks as collateral. The exports of specie from the port of
for November were $1,455,946, and the packet of Dec. 1 carried
hile the steamer from Boston carried $404,000, of which $300,000 was
York. The nature of the crisis was so well understood by the public
luct of the banks was regarded with some degree of contempt. The
re very large and individuals came forward to supply the market and
ge of the high rates paid for money on paper and the low prices of
sury Notes falling to 97 and Government Sixes to par. It was gen-
stood that the export of specie would be temporary, and that even
isasters continue abroad that the maturity and payment of the bills
not be sold would soon return the specie upon us. The balance of
undoubtedly in favor of this country, and the extent of the temporary
would be equal to the amount that would be drawn by financial
dded to the amount of produce laying dormant through the nonsale

The exports from the port of New York for the four months ending
nber, were were about 16,000,000 dollars, and probably from all
000,000 went forward; of this, at least one-third was unavailable, and
Sums were drawn from the United States by financial movements.
ney being not to be got in England, a house in good standing could
lls on itself at sixty days' sight, remit the amount in heavy sovereigns,
ash on arrival, and by so doing have the use of the money for sixty
expense only of the remittance. Many Canadian Government bills
rial Treasury were also offering. The rigor with which the banks
an caused the line of discounts to fall, and the lapse of each week
and 2 to $3 000 000 paid beyond the loans. With this process of
the demand for money slackened and business operations of all kinds
ished, sight bills at the South instead of sixty day bills discountable
demand. In the mean time the packet of November 4 arrived, with
hought better prospects; few or no bills were returned. on the other
had matured and were paid; a circumstance which was calculated
fidence in bills, while the decreasing imports diminished the demand
well as for specie for duties, and the market became more relaxed.
of the public was in a great measure sustained by reason of the
ich surrounds the banks. The whole mercantile interest has been
a panic because of the demand for specie upon the bank vaults:
o the interest of every man to be informed of its fluctuation: and of
drain. in order to form some idea when it is to cease. In London,
ice of this is acknowledged and the Bank of England is required to
y statements. The New York banks make them only quarterly, and
e leading houses recently memorialised the legislature to have the
le here weekly. The legislature have changed the law, but only
instead of the banks making their returns on a fixed day, for which
e, they shall make them on a day to be ordered by the comptroller.
mposed. will prevent them from expanding too freely at any time, but
ford the community the required information.

of affairs produced the most intense anxiety for the arrival of the
f the 17th, which took place on the 9th December. Her advices were
r of the determinate character which had been hoped for. Money
become somewhat more easy in London. but this arose from the
ration of exchange and the paralyzation of business rather than from
reform in the state of affairs. The same circumstances which have
e to flow from the United States to England, viz: the non-payment
there, have also caused it to move upon England to a greater or less
m st other quarters, and the supply so produced, has, in connection
ninished demand, brought about by the numerous failures and the
ice of important operations, particularly manufacturing caused an
e in the market, which promises to be temporary only. The famine
s by no means less *in magnitude* than last year, and if railway

demands are less it is because of the difficulty in getting money. The official returns continue to show importations into England of foreign produce for consumption in excess of last year, while the import of the raw materials for manufacture is less. Under these circumstances the returning ease of the money market only stimulates into activity those causes of adverse exchange, the operation of which was restrained by the pressure. The announcement of a loan of $50,000,000 by the French Government has been a bug-bear upon the market, which was relieved by the final adjustment of the loan to the house of Rothschild, at 75.25 per cent. for a three per cent. stock; the interest to commence immediately, but the amount to be paid in monthly instalments of 2,000,000 each. It will require two years, therefore, to pay up the loan. The Messrs. Rothschild immediately paid up the instalments due Nov. 22 and Dec. 22, and stocks generally rose. The mere fact of the Government, unstable as it is admitted to be, being able to borrow on such terms from so sagacious a house, imparted confidence. The available means of the Bank of England had sunk so low towards the close of October, that the liveliest fears began to be entertained. The bank charter act of 1844 took from the bank the power of issuing notes at will. It required that the institution should be divided into two departments, the one called the issue department would have deposited with it $14,000,000 of Government securities, out of the assets of the bank, and it should give the banking department an equal amount of notes to issue. Beyond this amount the banking department could issue no notes unless it gave the issue department an equal amount of bullion or specie. On the 23d October the issue department held £7,865,445 of specie and £14,000,000 of securities, for which it had given the banking department £21,865,445 notes. These had all been paid out in loans and in discharge of Government dividends on the national debt, except $,1547,270 which remained on hand and constituted the whole means of the banking department to make loans and meet any demand for private deposites, which amounted to £8,588,509. In this dilemma, the Government authorised the bank to infringe the law of 1844, by issuing notes as formerly without depositing gold in the issue department. It was to lend these notes at eight per cent. interest in sums not less than $10,000,000, and the Government undertook to procure from parliament a "bill of indemnity" for the bank for violating the law. Parliament was summoned for the 18th Nov. The new parliament is, however, a very radical one, more so than ever before, and the bank did not choose to run the risk of forfeiting its charter until the bill of indemnity should be first obtained. Because the new House might take it into its head to deprive the institution of many of its privileges as a condition of the "bill of indemnity." The bank, therefore, did not avail itself of the permission of the minister. In the mean time, the influx of gold, from causes alluded to, eased the market, and the bank returns stood as follows:—

BANK OF ENGLAND.

Date.	*Private loans*	*Notes on hand*	*Nett cirl'n*	*Deposites*	*Bullion.*
October 16, - -	$19,152,496	$2,623,969	$19,315,991	$8,682,584	$8,430,700
October 23, - -	19,467,128	1,547,270	20,318,175	8,588,509	8,312,691
	20,424,497	1,303,103	20,842,412	8,911,442	8,439,674
November 6, - -	19,919,915	2,030,085	20,396,445	8,804,395	8,730,351

On the departure of the steamer, parliament had just met, and this question of currency would probably be the first to come before it, making the news by the next steamer very important, but greater confidence was apparent in the rise in consols, the great barometer, and in the fact that although the bank minimum rate was still eight per cent., good paper could be done at six and a-half per cent. Much anxiety existed, however, in relation to the large amount of dishonored bills that had gone back to all the colonies.

This slight amelioration of the price of money had imparted a little more animation in the produce markets, and breadstuffs were firm and advancing, while more activity was apparent in the manufacturing districts. Buyers for many European markets had increased their purchases, and the tendency of cotton was to increase in consumption and price until the arrival of the Cambria with accounts of increasing crops depressed the market.

The news was regarded in a favorable light in New York, with respect to cotton, and holders seemed more disposed to consider that the lowest prices had been eached. The decline has certainly been very great in this market, having been eekly as follows, since the highest point, Sept. 15:—

PRICES OF COTTON IN NEW YORK.

ate	*Inferior*	*Good and ordinary*	*Middling and good middling*	*Middling fair and fair*	*Fully fair a good fair*
ept. 15, - -		11a11,1-2	11,3-4a12,1-2	12,5-8a13,1-4	13,1-2a14,1-4
" 22, -	10a10,1-4	10,7-8a11,1-4	11,1-2a12,1-8	12,3-8a12,7-8	13a14
" 29, -	10,1-4a10-12	10,5-8a11	11,1-4a11,3-4	12a12,1-2	12,3-4a13,1-2
ct. 6, -	9,1-2a10	10,1-4a10,5-8	10,3-4a11,1-4	11,1-2a12,1-8	12,1-4a13
" 13, -	9a9,1-2	9,3-4a10,1-4	10,1-2a10,3-4	11a11,5-8	10,3-4a12,1-2
" 20, -	none	8,1-4a8,1-2	8,3-4a9,1-4	9,1-2a10	10,1-4a10,3-4
" 27, - -	"	8a8,3-8	8,1-2a9,1-2	9,1-4a9,3-4	10a10,1-2
ov. 3, -	"	7,3-4a8	8,1-4a8,3-4	9a9,12	9,3-4a10,1-4
" 10, - -	"	7,1-4a7,5-8	7,7-8a8,3-8	8,3-4a9,1-4	9,1-2a9,3-4
" 17, -	6a6,1-2	7,7,1-4	7,5-8a8-1-4	8,1-4a9,1-8	9,1-4a9,1-2
" 24, - -	5,1-2a6	6,1-2a6,3-4	7,1-8a7,3-4	7,3-4a8,5-8	8,3-4a9
ec. 1, -		6,1-2a7	7,1-4a7,3-4	8a8,1-2	8,3-4a9
" 8, - -		6,1-4a6,5-8	7,1-4a7,3-4	8a8,5-8	8,3-4a9,1-8
" 11, -	none	6,1-4a6,3-4	7,1-4a7,3-4	8a8,38	8,3-4a9

This immense fall in price has been sustained with great firmness by the trade, ot more than two firms, one German and the other French, having been obliged suspend. The decline is to be ascribed as well to the money pressure in the ew York market as to the adverse state of the Lancashire operations. The rospect of the coming year would seem to be of continued agricultural prosperity. the demands of England are not quite so great for the better sorts of grain, either is the supply in the United States probably so ample. That Ireland will quire all the corn that she can pay for, is doubtless true; and large sales of that rain will probably be made at remunerating prices, more particularly that the igh freights of last year stimulated such an increase in the means of transporta- on, both internal and external, as greatly to diminish the cost of sending to arket. It must be remembered, that on the 1st February 1849, the corn duties England were entirely to cease by the law of 1845. The temporary suspension the duties which took place last year, was to continue until March, 1848. The esent parliament will discuss the question whether a low uniform duty will be nposed from March 1848 to February 1849, or whether the abolition shall take ace in March.

AGRICULTURE AND MANUFACTURES SOUTH AND WEST.

I. CULTURE OF SUGAR-CANE.

D. B. DE BOW, ESQ:

IN your June number you notice a communication to the "Planters' Ban- r." signed "Agricola," and appear to censure the spirit in which it was itten.* As the author of the article referred to, I must excuse its spirit of ire by the statement that I was then, and am now, unacquainted with the iter of the article commented on; and in examining the positions assumed, I s actuated by no other motive than to guard my brother planters against what onceived to be its errors. If in the prosecution of this motive I have allowed zeal to outrun my discretion or license, I hope to be excused for the reasons igned. as well as on account of my dialectical desuetude and ignorance, ich may have caused the "fault unwilling." I place too high an estimate on value of well-considered and well-written articles on Agriculture, and parti-

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*We are obliged to "Agricola" for the present paper, and receive his explan[illegible] ns. If our strictures have had the effect of bringing him out again, they have been lost. *We should be pleased to have him* for a frequent correspondent, *are sure that the public will be of the same* mind. ED.

cularly on the subject of our *peculiar Southern agriculture*, (such as the one referred to undoubtedly is) to do any thing in a spirit of mere wantonness to discourage the very few able and willing contributors. I hope with this amende to make my peace weth you and your correspondent; but should a lurking discontent remain in the mind of the latter. I will herewith give him whereon to exhaust his spleen—promising to take his heaviest blows in good part, and as a necessary atonement for sinning.

I conceive the much-lauded' plan of covering under the cane tops through the entire course of the cane's growth as plants and rattoons, to be of doubtful value on *stiff clays*, the only soil to which my experience applies. The evil is, that the covered blades and stalks in wet seasons retain so much water as to render *a crop* on the land impossible, going far to unsuit, for years, the soil for its highest possible productiveness. the natural result of a long retained superfluity of water on soil the texture of which makes water its greatest enemy.

I propose instead to burn the tops off after the first crop from plant cane, leaving the ashes as the only compensation to the soil for the years' subtracted fertility. In taking off the second crop or first year's rattoon. I make each cane cutter lay his top smoothly in the centre between the rows, each man on his left. and butts uppermost, that they may be killed by the winter frosts, and prevented from germinating. Immediately after sugar-making, I turn on the tops so placed. and subsequently regulated if necessary, two heavy furrows of a four-mule plough—and having carefully opened the ditches through the land. leave it in that condition until I have completed my cane planting when I throw out, with a similar plough, the intervening land and the stubble it contains, thereby perfecting the ridge for the reception of corn. The corn roots penetrating the soil superficially, and being placed high on the ridge—any superfluous moisture retained by the tops being drawn off by the now free water conduit between the rows—the land will produce finely. The next spring, leaving corn-stalks, pea-vines, &c. on the surface, the former being cut down and cut up with the hoe, I open the corn-ridge, and without other ploughing, place my seed cane immediately over a now thoroughly rotted manure pile, cultivating subsequently, *as usual*, or rather as I am in the habit of doing, *thoroughly*.

I thus establish a three years' succession on the land, two of which are of cane; and avoiding the clogged and difficult cultivation, and the consequent dammed water of the second year of the rotation of the present practice, I secure an early planting of cane. and a sufficient fertility, I hope, to the soil. On that portion of the first year's rattoon land from which my seed-cane is taken, I plant potatoes—any other crop will do as well. if there be another of equal value—which leaves a large green debris for turning under and subsequently planting over.

I know next to nothing of the processes necessary on sandy soils. This I remark: that writers whom I presume to live on sandy soils, and who are able advocates of the fashionable method introduced—as I have understood—by Mr. Samuel Packwood, are quite as strenuous advocates of thorough drainage; but by pursuing the plan now in vogue, are they not annulling the advantages they derive from good drainage, and, as Franklin says in 'Poor Richard,' "paying too dear for their whistle?" I think so—and deem that the plan I lay down for their consideration has great advantages. not the least of which is the early planting of their cane, and the consequent early stooling and early maturity of their crop.

AGRICOLA.

St. Mary's, (near Pattersonville,) Dec. 1, 1847.

Art. V.—THE CHEROKEE ROSE—Rosa Lævigata, (Michx.)

AND HEDGING IN THE SOUTH.

The suggestions of the following letter have been anticipated by us. We have, from the beginning of our work, given to Agriculture a prominent place, as the various numbers will evince. The subject has a permanent head in the Review, which it would please us to have occupied by the correspondence of our planters. We are indebted to the writer for his complimentary notice of our labors, and his well-wishes in our behalf. It is too true that the South has been indifferent to Agricultural knowledge, and that no periodical has hitherto been sustained, devoted exclusively to its prosecution. The cardinal motive with us, in establishing the Review, was the elucidation of ALL THE GREAT PRINCIPLES OF PRODUCTION, in every department of practical life. Commerce, as a general term, will include them all—and is, perhaps, the best that could be selected. It is this that brings the consumer to the doors of the producer. They could not otherwise meet. For this the plough is set in action—the spindle moves—the canals, the railroads and shipping are constructed. *The consumer must be supplied:* and it is alike the interest of consumer, producer and intermediate man, *merchant*, that all the complicated machinery be understood, and each division brought under distinct observation. Editor.

J. D. B. De Bow, Esq:

Treatise after treatise has been written and published upon the waste of timber in the common rail fence, where timber is yet to be had for such a purpose; elaborate estimates made of the yearly cost of such fences, in time, labor and material; and endless suggestions as to the best substitute to be employed in different parts of the country. Some propose dry stone walls—than which there can be no better fence, where the materials exist. Others, descanting upon the beauties of an English landscape, in which the neatly-kept hedges of hawthorn occupy so prominent and ornamental a place, propose its introduction here for that purpose, and quote the directions of English authors for propagating and planting it. Some, again, aware of this having been repeatedly tried, and without success proportioned to the cost, point out the adaptation of different native hawthorns, the crab-apple, honey-locust osage orange, &c., to different portions of our extensive and varied country. Then we have ditches and sod walls, and patent wooden fences of many kinds, for the prairie regions, and, last of all, we have it proposed, and earnestly and ably advocated by the editor of the American Agriculturist and his correspondents, to do away with fences entirely, every farmer housing and feeding his stock, or herding them on his pastures.

We have seen the substantial *stone dykes* of Scotland, and others after the same model in the Eastern and Middle States, and in Kentucky; the beautiful hedges of hawthorn, crab-apple, holly, beech, &c., in England and elsewhere; and close copies of these in different parts of this country, reared, planted and kept in order by a great expenditure of labor; excellent hedges of the Osage orange in Ohio and in Pennsylvania; the utter failures at fencing in the prairies of the West, with sod walls and ditches; and we have tried our hand at almost all of these in turn, and at every variety of wooden fence, from the last patent Yankee invention, to the substantial post and rail of cypress.—But in no country have we seen a fence of any kind so admirably adapted to the climate and existing state of things—so cheaply obtained and easily kept in order—so permanent, efficient and substantial, or more thoroughly tested, than the Cherokee Rose hedge. Many years have elapsed since this plant was first employed for the purpose of fencing in South Carolina and Georgia, and in Adams and Wilkinson counties, Mississippi. Excellent fences of it have there existed for a sufficient length of time to have led to its universal use in the Southern States; yet in many parts of those very districts, though timber has become extremely scarce, hedging is but little thought of—and elsewhere it is almost unknown.

This is by no means a rare instance in the history of Southern Agriculture, and, indeed, of the agriculture of the world. Farmers are proverbially slow in adopting improvements—some from indifference, others from a contempt for theoretical and book-farming—terms freely used when any thing out of the old track is proposed—and not a few from ignorance. It has been truly said, that the apothegm got up in the days of ignorance and maintained by her children ever since—"To plant well, is better than to theorize well"—has been "an instrument of more mischief than any two-edged sword," and of incalculable disadvantage to the agriculture of the South. "Modest merit too often shrinks before it. Let it be asserted, and asserted without the fear of contradiction, (says the same writer—J. E. Jenkins, in the *Southern Agriculturist*, vol. 7, p. 174) that *theory is the incipiency of all acts;* that the first clod of earth that was ever designedly broken for the introduction of seed with the intention of reaping its production, was the effect of speculation and of mental arrangement. To be able to speculate, proves a scrutinizing faculty; and to theorize to success, the highest mental endowment." He remarks, further: "It is easy for the most ignorant clod-hopper to call himself a planter, and no theorist—as if he thereby conferred upon himself some honorable distinction, whilst he heaped upon the head of his neighbor—whose mind eludidated his practice, and who is not unwilling that the world should share with him whatsoever of good he can impart, —coals of fire and molten lead."

Strong language this, yet how true! No improvement is proposed, no new thing introduced to the planting world, without meeting with severe checks from self-sufficient ignorance. It is on record that the cultivation of cotton as a staple crop, and those who sought to introduce it, were included in the same sneering remark—"a fit crop for a petty farmer, but not for a planter." *Horizontal plowing and the side-hill ditch or guard-drain*, are most valuable instances of "theorizing to success," and require a mind of but very moderate calibre to comprehend their advantages. Yet the first was adopted slowly, and not until whole States had been almost ruined by the old method of plowing up-and-down hill, and is even now unknown in many districts. The latter—the guard-drain, or side-hill ditch—is as yet a thing unheard-of by ninety-nine in a hundred of the hill-planters of the South; or, if attempted, without a correct knowledge of those principles without which incalculable harm, instead of good, is done. Yet this most perfect preventive to the washing away of the surface soil and the formation of gullies, has been known and practised with complete success; and full explanations of the principles upon which they should be laid out, and directions for the work, have been published many years ago. And even plantations nearest to others completely protected in this way from washing, are being washed into gullies, and losing what little soil is left to them, without a judicious effort on the part of the owners to prevent it. And thus it is with many other improvements of equal, or even greater, value.

Much of this might be remedied by means of an ably conducted Southern Journal of Agriculture, through which those farmers willing to impart the benefits of their experience—of their "theorizing to success"—may be induced to do so, sustained by the countenance and support of a well-informed, judicious Editor, against the sneers of folly, or detractions of envy and ignorance.

To you, my dear Sir, we must look for a *South-western Journal of Agriculture.* You have established the Commercial Review upon a permanent footing, and under disadvantages and trials of which no one can form a conception who has not gone through the like—and stand forth the able advocate of the commerce, and, incidentally, of the Agriculture of the South. You are giving, each month, increased interest and value, with increased size, to the Review. You already include, as remarked, the subject of Agriculture and Agricultural improvement; so it is doubtful whether another and distinct periodical, devoted solely to that interest, great though it be, could be sustained. Nor would it be good policy to attempt it. Would it not, then, be advisable to appropriate a separate and sufficient space in each month's Review, to Agriculture and the Sciences, and interests immediately connected therewith—thus offering additional inducements to the planting community to sustain the Review, not only by their subscriptions, but by their pens? Be assured it would. Think of it. We have heard the plan suggested, more than once, by the friends of the Review.

The following essay is offered you for the proposed department—or as you may please—with the hope that it may prove acceptable to you and to your readers.

I am, &c., yours, THOMAS AFFLECK.

"THE CHEROKEE ROSE."

At page 461, of vol. 1, of Terry & Gray's *Flora of North America*, will be found the following description of the plant named as the subject of this article. It is there classed amongst the "naturalized species."

"*Rosa lævegata*—(Michx.): very glabrous; branches armed with very strong, often geminate curved prickles; leaves three- (sometimes five-) foliate; leaflets cariaceous, shiring, sharply serrate; stipules setaceous, deciduous; flowers, solitary, terminal; tube of the calyx ovoid, muricate, with long, prickly bristles. *Michx.! fl.* 1., *p.* 295; *Ell. sk.* 1. *p.* 566. R. Sinica, *Ait. Kenw.*, (*Ed.* 2,) 3. *p.* 261; *Bot. Mag.*, *t.* 2487; *Lindl.! Ros. p.* 127, *t.* 6, *and bot. veg. t.* 1922; not of *Linn.* R. nivea, *D! hort. Monsp.*, *& prodr.* 2. *p.* 598. R. hystrix, *Lindl. Ros.*, *t.* 17; *D. C. l. c.* R. Cherokeensis, *Donn*, *cs.* R. ternata, *Poir*, ex *D. C.* R. trifoliata, *Bosc.* S. Carolina! to Louisiana! cultivated in gardens and extensively naturalized. April.—Stem with long flexible branches, capable of being trained to a great length. Flowers very large, white.—This evergreen species has been cultivated for many years in the Southern States, under the name of *Cherokee Rose.* It is doubtless of Chinese origin; but as it is not the R. Sinica of Linnæus, we continue to use the name of Michaux, which is several years older than the second edition of the Hortus Kewensis. According to Elliott, it is well adapted for hedges. It is certainly too tender to endure the winter of the Northern States; hence the plant from Lake Huron referred to this species by Mr. Borrer, in Hooker's Flora, must be very different."

Thus far for the Botanist. To the Farmer we will offer a more easily understood description.

But first as to the FOREIGN ORIGIN of this valuable plant. Messers. Torrey & Gray, who are high authority, speak positively on this point. Prince, in his Catalogue of Roses, states it to be a native of Persia, but does not give his authority. Its appearance and habit are foreign; yet we would gladly identify it as a native, and think it quite probable that it is so—and offer the following statements in support of that opinion:

The December (1831) number of the 4th volume of the Southern Agriculturist, (Charleston, S. C.,—a most valuable journal, now, alas! no more) contains one of the (previously) unpublished manuscripts of the late Stephen Elliott, "upon the culture of the Cherokee or nondescript Rose as a hedging plant," in which occurs the following passage:

"The history of this plant is obscure. It was cultivated before the Revolution by the late Nathaniel Hall, Esq., at his plantation, near Savannah river, and having been obtained from thence and propagated as an ornamental plant, in the garden of Mr. Telfair, and the Messrs. Gibbons' of Sharon of Beach Hill, under the name of the "Cherokee Rose." It is probable that it was originally brought down from our mountains by some of the Indian traders. Mr. Kin, a most indefatigable collector of the plants of the United States, and I believe a very worthy and honest man, assured me that he had found this rose on or near the Cumberland mountains, in Tennessee. Michaux met with it in the gardens in Georgia, and perceiving it was an undescribed plant, he introduced it into the gardens near Charleston as a nondescript Rsse. Hence it has obtained in that neighborhood the popular, but absurd, name of "the Nondescript." In Georgia, it has always retained the name of the "Cherokee Rose."

In the second volume of the American Farmer—that pioneer journal, to which, with its veteran editor, J. S. Skinner, we are indebted for more than the non-reading portion of the farmers of the present day have any idea of—at page 118, is a communication signed "Wm. W. Anderson, Statesburg, S. C., June 16, 1820," from which we quote in support of the same opinion: "*This* is a *native* plant, and has been generally called, in South Carolina, *nondescript.* It is now more properly known by the name of Cherokee Rose, on account of its being found in the greatest abundance in the tract of country inhabited by the Cherokee Indians.",

We have no facts of our own to offer—but think the above views so clear and positive, that they may safely be advanced in support of the *hope* that the Cherokee Rose may prove to be indigenous to the South, and not an exotic.

The *Rosa lævigata* is an evergreen, approaching to a vine in its habit of growth; the leaves are very dark green and beautifully glossy, or shining—hence its specific name. Its long and strong shoots are completely covered with stout and very sharp prickles, curved backwards. The wood soon acquires a hardness which prevents its being browsed upon by any kind of stock—though, during a hard winter, cattle and sheep will pick off the leaves, without injury to the plant. The blossoms, which appear very early in the spring, in vast numbers, are large, single, and of a peculiarly clear and pure white. The flexibility of the long shoots allows of their being laid up into any form or position that may be desired; and as they readily take root when layered, weak places in a hedge are quickly and permanently strengthened: and though inclined, if neglected, to run wild, it bears the knife and shears well, and can readily be reduced again to order whenever desired. We have seen hedges of it occupying a space of twenty feet, and from fifteen to eighteen feet high—picturesque objects in the landscape, but bad marks of neat farming.

We would commend this plant for hedging for the following reasons: for beauty, strength, permanency, facility of propagation and culture, freedom from disease and from injury by stock or insects, peculiar adaptation to our climate and wants, and to farms cultivated by negroes, the rapidity with which it forms a perfect and substantial fence, the exemption of such fences from destruction by accidental fires, and the facilities it offers the planter of forming permanent enclosures without exhausting his supply of timber.

[TO BE CONTINUED IN OUR NEXT.]

II.—DIFFICULTIES IN THE SUGAR CULTURE.

THE annexed letter was sent, we are sure, without any disposition on the part of the writer, Mr. Brashear, for its publication. We, however, take the liberty—a sort of editorial one—in this instance of giving it to the public, assured that if it can effect good the author will not object. The experience of our intelligent planters is worth a great deal and should be freely given to each other. We have often invited them and still invite them to fill a department in our Review with their correspondence.—EDITOR.

I hope your valuable work will be sustained to the full remuneration of yourself for your labor and enterprise; as I am sure your patrons will insure an ample reward for the pittance they contribute individually. I have seen with pleasure the interest you have taken in our important staple of sugar, and although you may sometimes be deceived by those who think they have made important discoveries in the culture and manufacture of sugar, yet every investigation leads as to the correction of errors, of which I believe there are more in the management of the cane crop than any other staple produced in the country. And why? It is because the cane, in my opinion, possesses a character *sui generis*, which, notwithstanding the closest observation for twenty-five years has baffled the sagacity of the most experienced planters in the country; and all who speak in candor admit that the character of the cane plant is still a mystery. The success of one planter, who this year succeeds upon some innovation which he has made on former plants, fills him with the hope that he has found out the great secret in making a cane crop, and behold the next year the same process is an entire failure,—and thus have our hopes risen and fallen. during my experience of twenty-five years. Sugar planters have run into extremes in their changes generally.. For many years they planted too close: on finding that wider planting succeeded better, they extended it too wide—from four feet they have gone to eight in many instances. New and rich lands admit of the greatest distance, and thus the cane shows one of its peculiarities. If you put a short quantity of seed on old slow land, the cane will be backward, no matter what the season may be, it will never advance upwards until it has filled the ground so as to shade it at the base, and this in a plant that requires so much heat to mature it, is another enigma not easily solved. Some seasons I have known water to stand around cane for weeks at a time, in midsummer, and still the crop was luxuriant and fine; and other seasons I have known it entirely destroyed with a less duration of the water about its roots. But who would suppose, but he who kows the fact, that roots of cane, small and delicate in appearance, would penetrate three or four feet in in the hardest soil we have. This I discovered many years ago from a deep gulley being washed through a cane field on the side of a hill on Belleisle. And to this peculiarity of cane root penetrating the hard soil I attribute the successful growth of cane surrounded by water after the roots have entered the solid earth where the water is excluded, but would necessarily be drawn by the same water coming in contact before the roots had buried themselves in the soil not penetrable by water.

I do not wish to tire you with this scrawl, but have only to add that we have more to learn on this subject than we have at present acquired.

INTERNAL IMPROVEMENTS—MINING, RAILROADS, ETC.

I.—HOLLY SPRINGS AND MEMPHIS RAILROAD.

Holly Springs, Miss., November 10th, 1847.

J. D. B. De Bow Esq.—

I am much pleased to see the ability with which you advocate the construction of railways through the planting States, in the Commercial Review. I hope you will continue to do so until the citizens of the South and South-west shall awaken to their own interest and the public welfare. I hope every planter and commercial man throughout the planting country, who has the welfare and prosperity of his country and his own at heart, may become the readers of the Commercial Review.

Being a warm advocate of railways and desiring all should become acquainted with their true merits and advantages, I wish to state a few facts for your information; facts with which you may or may not be acquainted, in the hope that you may interest the good people of your city in a work now in contemplation.

In 1836 or '37 a charter was granted by the State of Tennessee to construct a railway from Memphis to La Grange, with a branch to Somerville, Tenn., the length of the main branch being about seventy miles—the State of Tennessee taking one half of the capital. The great fault of the charter was this, it required each five miles of the route to be commenced and completed at the same time; the consequence was, the road was graded the whole distance or nearly so, and no part being put into operation, the capital was exhausted and the monetary difficulties of 1837–'8 occurring about this time, the work was abandoned. The grade has remained unto this day—now become firm and far better than any new grade can be, with very slight repairs.

The public mind has quite recently been directed to the completion of this work. An application has been made to the Legislature of Tennessee, now in session, to incorporate the Holly Springs and Memphis Railroad Company and grant to the new company the interest of the State in the old road. As yet it has not become a law, but we have very sanguine hopes that it will before the Legislature adjourns, when, it is expected the interest of individual stockholders can be extinguished at a small compensation.

This being accomplished, the new company will commence with thirty-five miles of old grade, compact and firm, that can be put in full repair before the iron could be received. The residue of the distance to Holly Springs, being about twenty miles, would be over a very level country of easy grade, crossing no stream of sufficient magnitude to increase materially the cost of construction. It is estimated the road would cost about $10.000 per mile, making use of that T or H. iron weighing fifty-six pounds per yard, including depots, locomotives, cars, etc.

Do you see what interest the city of New Orleans has in the completion of a railway at such a distance from her borders. Will you take the map of Mississippi and examine it with me: the counties of De Soto, Marshall, Tippah, Tishomingo, Tunica, Lafayette, Panola and the Northern part of Pontotoc, trade at Memphis;—the cotton is carried to Memphis on wagons over as bad roads as any country was ever cursed with, and for a portion of the year absolutely impassable for loaded wagons. The Southern part of Pontotoc county with the counties of Itawamba, Chickasaw and Monroe trade at Mobile, transporting their produce down the Tombigbee river, which is only navigable for two or three months in the year. These last named counties contain some of the best cotton lands in the State. *Monroe and Chickasaw counties* will, in a few years, export more cotton than any other three counties in North Mississippi. If this then be true, and the facilities of railroad transportation be constructed from Memphis fifty or fifty-five miles into the interior, in the direction of those counties trading at Mobile, will it not extend the radius of trade with Memphis some fifty miles further than now exist? By doing this will it not draw the trade of the counties above named to Memphis and thence to New Orleans, thus diverting it from its present channel. The railroad completed from Memphis to Holly Springs, the Southern terminus cannot long remain at the latter place; it will, sooner than we now expect, be extended to the waters of the Tombigbee. Then will New Orleans grasp in its iron fingers the trade of Lowndes, Octibbeha and Noxubee counties, Miss., and the counties of Fayette and Pickins, Alabama, all now trading at Mobile. The planters of these counties would not wait the raising of the waters of the Tombigbee, when there existed an uninterrupted railroad and steamboat communication to New Orleans at all seasons of the year. If this be so, then is it not true that New Orleans has an interest in the construction of a railway from Memphis to Holly Springs. True says the merchant of the Crescent City, extend the road to Aberdeen or Columbus, and we have an interest; let all such recollect that even New Orleans grew from small beginnings to its present size and importance, and that a railway from Memphis to Holly Springs is only the commencement of the *beginning*.

If your patience is not already exhausted, I will add a few lines upon the subject of an eastern extension to connect with the Georgia and Carolina railroad at Tuscumbia. You know too well for me to repeat it, that Memphis is but little north of a due west line from Charleston, and almostly directly west from Rome and the most western terminus of the Georgia railroad; from Rome to Gunter's landing on the Tennessee river, I suppose to be about sixty miles; from Tuscumbia, the western terminus of the Decatur railroad, to Holly Springs, one hundred and ten miles. These two links of the great chain completed, and we have an uninterrupted railroad and steamboat communication from New Orleans *via* Memphis to Charleston and Savannah, opening a direct and speedy communication with North Alabama, East Tennessee, Georgia and the Carolinas.

I hold it to be true, that railroad transportation is the cheapest and best now known, if the amount to be transported is nearly equal to its capacity. If this is so, it is needless to say that there now exists steamboat communication by the Tennessee river with North Alabama and East Tennessee. The saving of insurance would of itself more than keep the road in repair, saying nothing of the saving of interest by the more speedy transportation. To facilitate communications and cheapen transportation should be one great object of the citizens of a commercial city, and thus extend the circle of their trade.

What benefits the commercial city also benefits the grower of the product to be transported—one is benefited by the increase of trade, the other by the decrease of the value of transportation. The planter saves his insurance, saves in interest, saves in the cost of transportation, and if a stockholder becomes in part his own carrier, puts a portion of the profits of the road in his own pocket, is made rich by the increase of value of his landed estate in having it brought nearer to a great commercial market. Then I might notice the inducement to imigration, the improvement of lands, the opening of roads, the erection of manufactories. But I shall tire you—if I have not already done so. Pray excuse this liberty; my only object is to express my satisfaction of your course and, perhaps, impart a little information that may do you no harm, in the hope that you may induce the good people of New Orleans to lend their aid and influence to a work of so much importance, and believe me,

Dear Sir, your friend and well wisher,

WM. GOODMAN.

II.—HARBORS AND RIVERS.

The President of the United States has vetoed the *Wisconsin Improvement Bill* and set out at large his objections, in a message to Congress. This constitutes another evidence of what Chancellor Kent long ago remarked—"The weight of executive power has been thrown during a greater portion of our history into the opposite scale." We have, on frequent occasions, referred to this whole discussion, particularly in our leading article of September, 1846, to which the reader's attention is called, if desirous of a further prosecution of it.

The President's objections to the bill before him are founded upon the fact, that it appropriates one-half million of dollars for "the improvement of numerous harbors and rivers lying within the limits and jurisdiction of several States of the Union." He considers such improvements as belonging peculiarly to the States, and shows that during the early portion of our history they were conducted by them, Congress in many instances giving its "consent" to the action of State Legislatures. Thus—

Act, Rhode Island, 1790, tonnage duty levied for clearing, etc., Providence river.
" Massachusetts, 1798, tonnage duty for improvement Kennebec river.
" Pennsylvania, 1805, tonnage duty to improve navigation Delaware river.
" Virginia, 1804-'26, tonnage duty for improving navigation James river.
" " 1824, " " " " Appomatox "
" North Carolina, 1821, " " " " Abermale Sound
" South Carolina, 1804, " " building Marine Hospital.
" Georgia, 1787, 1804, " " clearing Savannah river, etc.
" Maryland, 1783-'91-'93, " " improvement harbor of Baltimore, etc.

All of these acts levied "tonnage duties" upon commerce, and Congress have passed many acts giving its "consent" to these and other State laws, the first of which is dated 1790, and the last in 1843. By the latter act the "consent" of Congress was given to the law of the Legislature of the State of Maryland, laying a tonnage duty on vessels for the improvement of the harbor of Baltimore, and continuing it in force until the first day of June, 1850.

As this whole matter is one which for a long time is destined to occupy the attention of the country, we shall watch it closely, and from time to time present the results to our readers.

The progress of railroads among us is one of the great miracles of modern art and civilization, and it is our wish to present in a summary form, each month, those results, which are more peculiarly interesting to us at the South and West. An occasional paper will be devoted to the railroad system of our country and of the whole world.

III.—WHITNEY'S PACIFIC RAILROAD.

The projected road from the North-western States to the Pacific, advocated by Mr. Whitney, has increased its proselytes, if we may judge from the resolutions lately sent to Congress by the New York Legislature, and the resolution passed by that of Alabama. Mr. Whitney is now in the Southern States, devoting all the energies of his mind to the presentation of his scheme and securing co-operation in carrying it out. We are willing that the matter have a calm consideration.

IV.—CHARLESTON AND TENNESSEE RAILROAD.

An important convention was held in September last at Knoxville, Tennessee, to consider upon the importance of a railroad connection between the South Atlantic sea coast and the interior of Tennessee. Col. James Gadsden, of Charleston, made a report, setting forth in strong language the advantages which he conceived, were enjoyed by that city, as a mart of trade and commerc

‘‘It is believed, that on a comparison of markets through a long series of yea that of Charleston, for domestic produce, will be found to have been the mo steady, the most remunerating, and least subject to those extraordinary fluctuations and vibrations which characterize that of New Orleans—the only reservo of those immense floods of produce which are annually borne on the Mississipp to its Levee. Productions too often do not pay the expenses of transportatio Your committee regret that they have no documents at hand, on which to institut a comparison of markets for a series of years, by which they could arrive at conclusions more certain than those with which they are now impressed. A publication in one of our papers gives us a comparative exhibit of ruling prices betwe New Orleans and Charleston in September:

CHARLESTON.		NEW ORLEANS.	
Cotton—from	10 1-4*a*12 1-2	Cotton—from	10 *a*12
Bacon, shoulders,	7 1-4*a* 9	Bacon, shoulders,	6 *a* 6 1-
“ sides,	8 1-4*a* 9	“ sides,	7 *a* 7 3-
“ hams,	9 *a*11	“ hams,	9 *a*10
Corn,	70 *a*75	Corn,	50 *a*60
Flour,	$ 6 1-2*a* 7	Flour,	$ 5 1-2*a* 5 3-
Rice,	5 1-2 per 100 lbs.	Rice,	6 1-2*a* 6 3-

It is to be regretted that the comparison was confined to so few articles, though it embraces many of the leading productions of our Western country. Lard, Butter, and many other smaller articles, though not included, it is believed will be found to have been in the same proportion in favor of Charleston. The average price of the former, (and of ready sale at all times,) for West India demand, as well as home consumption, has been from 9 to 12 cents, and of the latter, from 20 to 25 cents. Fresh Butter (and railroads will always afford the means of furnishing it fresh,) commands from 15 to 20 per cent. above the current reported rates. So through the whole catalogue of Western productions may ruling prices be shown, which hold out the strongest stimulants to the people of East Tennessee, if the barriers which now interpose obstacles to a steady and uninterrupted intercourse with Charleston were broken down by a continuous railway, such as the Hiwassee, the last link in the chain remaining to be finished —so certainly promises. Carolina and Georgia are at the door of Tennessee; they have brought their roads to her very borders, and that we may show what has already been accomplished in confirmation of the views as to time and prices, we annex the rates of freights from the last tariff published. From Charleston and Savannah to Knoxville, the entire freight, including boats on the Tennessee, or wagons when the river falls, is—

On hats, bonnets, etc., per foot measurement,	$0 32
On merchandise generally, per 100 lbs.,	2 20
On sugar, molasses, coffee and groceries,	1 40
On flour, bacon, pork and domestic productions,	1 00
The average per 100 lbs. on the above is, we believe,	$1 53

The railroad freights to Dalton are—

On merchandise, etc., per 100 lbs., but	1 40
On molasses, sugar, coffee, etc , per 100 lbs., but	80
On flour, bacon, pork, etc., “ “ “ “	70

If the railroad was finished to Knoxville, and the same rate of freight charged as on the Carolina and Georgia roads, the entire freight to Knoxville would be—

On merchandise, etc., per 100 lbs.,	$1 68
On molasses, sugar, coffee, etc., per 100 lbs.,	96
On flour, bacon, pork, per 100 lbs.,	84
Which would be an average per 100 lbs. of	$1 16

The average freights on merchandise, groceries, etc., from Baltimore, by wagons, to Knoxville, used to be from seven to eight dollars per one hundred pounds, and from the best information of which your committee are in possession, the average freight *via* Richmond, the Virginia Canal, and wagons from Lynchburg, is about four dollars and fifty cents per one hundred pounds—about two-thirds greater than the railroad rates now paid.

The tariff of freights on the Carolina and Georgia railroads, and which are likewise subject to a heavy transmit charge at Augusta, but which are included in the rates above, are based on the existing business, which will not admit of just remuneration for services performed at any great reduction. But the business of a railroad is unlimited. Any amount, with adequate motive and car power, (which constitutes but a small proportion of the outlay, compared with the cost of the road-bed,) can be performed and freights can be made to decline on that universal law of trade, by an increase of business. On the Reading road, in Pennsylvania, where the cars are constantly employed, with inexhaustable quantities of coal, always ready for transportation, and where their locomotives lose no power, but are always employed to their full capacity, the rate of freight has been reduced to the extraordinary low figure (and paying a profit) of one cent per ton per mile. At the same rate, a ton of goods might be transported from Knoxville to Charleston at $5 20 per ton, or about 24 cents per 100 pounds. Your committee do not present this statement to encourage the idea that our Southern railroads could be worked profitably at these low rates, nor do they believe the community would desire less than remunerating prices for services performed; but they are offered in illustration of the vast capabilities of railroads in reducing charges, and as the strongest evidence that the increased business which would necessarily be stimulated by the completion of the entire line of railroad to Knoxville, would strongly induce and fully authorize the managers of these league roads (Georgia, Carolina, and Tennessee) to fall on rates some 25 or 30 per cent. below the present ruling fares.

In conclusion your committee can only add, that under the spirit of the age for rapid railroad intercommunication, if this section of the country will not avail itself of the vast benefits which those avenues of intercourse proffer, others will, and East Tennessee may soon be surrounded by railways, as she is by the mountains, which from this city (Knoxville) bound the horizon in every direction. But your committee will not permit themselves to doubt but that the spirit of the Convention of 1836 will re-animate those to whom this appeal is addressed, and that with one united effort there will be a hearty co-operation in making Knoxville one of the environs of Charleston, and the citizens of each feel that they are the people of but one community.

V.—ST. LOUIS AND CINCINNATI RAILROAD.

The project of connecting St. Louis, Missouri, and Cincinnati, on the Ohio, by a railroad and thus bringing the valley of the Missouri river into communication with the great lakes, is also in active discussion. A Convention at Indianapolis passed the following resolutions upon the subject:

WHEREAS, public attention has of late been directed to the importance of constructing a railway between the city of St. Louis on the Mississippi river and Cincinnati on the Ohio, whereby in course of time a continuous railway communication will be formed with the Eastern Atlantic cities; and whereas, the right of way for such purpose has already been granted by the States of Ohio and Indiana under liberal charters passed by the respective Legislatures; and whereas, the Terre Haute and Richmond Railroad Company, created under the charter of the last Legislature of Indiana, has already been organized, be it

Resolved, That this Convention does not doubt the practicability and ultimate completion of this great public improvement, passing, as it does, through one of the richest agricultural regions in the world—connecting the commerce of the East and West—bringing into the immediate proximity the chief commercial cities of the Union, and promising the richest returns for their investment of capital.

Resolved, That a committee of seven, (*of whom the President of this Convention shall be one,) be appointed by the chair to* prepare and publish an address setting forth to the country the character, importance and practicability of this work—the commercial and agricultural resources of the country through which it passes—the great advantages it will secure to the country and to capitalists, and such other matters connected with it as may be of general importance, and that the same be prepared and published at as early a period as possible after the adjournment of this convention.

VI.—MOBILE AND OHIO RAILROAD.

MR. TROOST, who was appointed to survey the route for a railroad from Mobile to the Ohio river, and whose valuable paper upon the subject we published last year, (though incomplete, in consequence of the author's not sending the whole of the manuscript, as we maintain,) has published a letter in which he refers in flattering terms to the prospect. We wish our sister city. Mobile, the most unbounded success in this, her great enterprise. Mr. Troost says:

The estimates which I made for grading the road, in the pamphlet, will be greatly reduced; indeed I have no hesitation in expressing the belief that your railroad can be built in the best manner for a smaller sum per mile than any other railroad in the United States. The route, generally speaking, is level. It abounds in timber of the best quality. There will be no rock to encounter, and the excavations and embankments will be for the most part through a good mixture of sand and clay. As far as my examinations have extended, I could not wish for a more level or direct route. If the northern portions of the line will compare with the southern, a railroad can be built which will excel any other for the transportation of freight and passengers, for the reason that it can be constructed *straight* and *level*, or with a *descending grade* to the point (Mobile) to which the heavy freight will be transported. A very lively interest in favor of the road has been expressed by the planters and citizens along the line and to the west of it.

VII.—CONNECTION OF SEA BOARD AND MOUNTAINS OF SOUTH CAROLINA.

WE have before referred to the various schemes advocated in South Carolin
for the connection of the sea board and interior with the mountains of that Stat
and North Carolina. The Legislature has been invoked in aid of private enter
prise, but jarring views in reference to routes, have excited an unfavorabl
influence, as far as we can learn. A meeting lately held at Monticello, in it
report, states the following propositions as demonstrable:

1st. That the Broad river valley affords the best route for a railroad, whereb
to reach the interior of the State from Columbia.

2d. That the interest of the Charlotte, Greenville, and Spartanburg scheme
would be eminently promoted by a union over our common trunk along the valle
of said river, inasmuch as the cost to each would be greatly less, while the goo
of the greatest number would be secured.

3d. That should the Legislature determine to apply any portion of the "surpl
fund," in aid of these several enterprises, it would be *best expended* in the co
struction of one common trunk, along the line indicated in the preceding resol
tions, to which they all could and would unite at some point.

4th. That the Greenville Company, independent of any prospect of union wi
other companies, would promote its interest by locating over the Louisville su
vey, along the Broad river valley to a point as high as Cannon's creek, if no highe

VIII.—CONNECTING LINK RAILROAD.

WE may so entitle this road, which is proposed between Wilmington and Ma
chester North Carolina. At the latter point it will unite with the branch road

Camden, S. C., and thence on the Augusta Road. Thus will be united by one continuous chain of locomotive travel the extremities of our union. A late number of the Rail Road Journal edited by our esteemed friend, D. K. Minor, remarks:

By examining the map it will be seen that the Camden branch, which is now in course of construction, and which will probably be extended to Charlotte; and the Columbia branch, is now, and has long been in operation, and which will beyond all question, be extended to Greenville, will open to this road an extensive region of the upland and most productive part of South Carolina; which, in addition to the through and way business, must ensure good returns upon the investment; and therefore, the people of Philadelphia, Baltimore, Washington and Richmond have a double inducement to give their aid to this work, and especially the merchants of Baltimore and Philadelphia, to whom a *wide berth* is given by all who go direct from Charleston to New York by those splendid steam packets. If the merchants of Philadelphia and Baltimore would secure the visits of Southern merchants and business men, *they must aid* the people of Wilmington, and others laboring in this enterprise, to build this road; they must subscribe to its stock—they must show that they feel an *interest* in its early completion—they must do as *Boston* did to draw business from New York. Indeed, they have the same inducements for aiding in this work that Boston *had* in building the Western road, and *has* in constructing the Ogdensburgh and the Vermont roads; and to a certain extent, that the Philadelphia people have in building the Central road to Pittsburgh—viz: to make the communication easier with Philadelphia, than with other cities,

IX.—MINING RESOURCES OF NORTH CAROLINA.

From a late No. of the "Mining Journal," New York, we learn the following:

The Washinton lead mine in Davidson county, cleared, during one year of its existence, twenty-five thousand dollars, on a capital of only double that amount.

At Gold Hill, there are eight different mining interests, averaging fifty per cent. on their capital on the yield of gold.

At Salisbury, there is a fine quarry of granite, superior to that of New York or New Hampshire.

In Gaston and Lincoln counties, there are abundant iron ores, and also in Catawba. Active forges are in operation.

A fine bed of chalk exists near Lincolnton, answering for pencils or paint; also a bed of limestone and a quarry of variegated marble. Dr. Burton has discovered a vein of *lapis lazuli* of the finest quality, said to be the first in America.

Throughout the counties of Montgomery, Caldwell, Rutherford, Burke, and McDowell, gold ores abound and mines are worked.

X.—MINERAL WEALTH OF MISSOURI.

Dr. Lewis Feuchtwanger gives us this summary:

The mineral wealth of Missouri has long been proverbial. The discovery of lead, in 1715, and the production of 9,000,000 pounds, in 1846, must naturally attach sufficient importance to this State. Latterly, also, iron has been made very conspicuous in it, especially since attention has been drawn to the iron mountains of Southern Missouri, which, according to my approximate calculation, contain not less than 600,000,000 tons of iron in their bowels. A short time ago, (1847,) a report was made by Dr. King on the subject of erecting more furnaces on a new locality on the Mississippi river, called Birmingham, and he says that iron exists in that particular spot in great abundance. One ridge, which is called the *Iron Ridge*, contains an immense deposite of *hydrated brown oxide*, averaging from fifty to sixty per cent. cast iron, which shows itself for several acres over the summit of the ridge,and *extending down its flanks* on each side to the adjoining ravines, *where the ore may be seen in thick masses.*

As regards iron in the State of Missouri, it appears as plenty there as coal in Pennsylvania; and wherever it is situated, appears to lay in such huge masses, like the coal mines in Mauch Chunk, Pennsylvania.

Next to iron is COPPER of great importance to the State of Missouri. Large tracts, containing this valuable ore, have been discovered on Current river; and on Merrimac river, and in the Southern part of the State, very good veins of copper have been discovered, and wrought to some advantage. In Jefferson county, a very good prospect of copper mines may be seen.

COBALT, is an ore of no less importance than the former. It occurs in the form of black oxide and sulphuret, and is found either in thin layers, in lead mines, accompanying the *drybone*, (*carbonate*,) or in connection with manganese, which is found to contain the cobalt from five to fifty per cent.

ZINC, in the form of sulphuret and carbonate, or calamine, is found in great abundance in the lead mines, where it appears to form the lens, or shell of the veins of lead, it being found on the upper and lower crust of the rock. It is thrown away as useless by the miners, although there are imported into this country over $200,000 worth annually.

SILVER.—It is ascertained that the average of silver contained in all the Missouri lead ores, is from six to eight ounces to the ton, but it has never been attempted to separate the same before bringing the lead in market.

NICKEL.—This rare ore has been found to accompany the copper and cobalt, particularly in localities where the latter is found in a state of sulphuret and combined with the copper ore. One shipment of a mixture of the three metals, averaging in the greatest part the copper, and cobalt and nickel in smaller proportions, has been made a year ago from Mine la Motte, and I understand it has proved profitable.

MANGANESE abounds all over the southern part of the State of Missouri.

Among the non-metallic substances, BARYTES deserves a conspicuous place in this State; for it is found here in great abundance, and of a beautiful white color, suitable for admixture with white lead.

XI.—RAFT IN RED RIVER.

In November last, there assembled at Washington, Arkansas, a large convention of the citizens of that State and Texas, to take into consideration the subject of the interruption of the navigation of Red River by the great and well known RAFT. From the memorial of this convention addressed to Congress, we extract:—

There is a great and growing barrier to our commerce and prosperity, and the longer it remains the greater will be the difficulty of its removal. We need scarcely state that we allude to the great Raft in Red river. This great obstruction has retarded our growth as a State, for so long as our navigable rivers are locked up, emigration will be checked, and the fertile lands which are everywhere to be found above the raft on and contiguous to Red river, will continue to be unsold and settled.

* * * * * * * * *

The whole people of the United States, are, as we conceive, indirectly interested in the improvement of this great river. It takes its rise far beyond the southern and western limits of our national domain, and the productions of millions and millions of acres of land must of necessity be shipped down it to the various markets for which they may be designed. There are thousands and thousands of acres of unlocated lands above the raft, which would meet with ready sale if there were only open navigation in said river—indeed, we know of no section of the Southern country which would offer so many and varied inducements, and become so inviting to emigrants, as the whole of Southern Arkansas, Northern and Western Texas, and the rich and picturesque country now owned and inhabited by the Choctaw Nation of Indians. We have not the language to express in adequate terms, the many and great inconveniences we suffer on *account of this great* obstruction in the river. In consequence of it, our finest ds are frequently overflown and greatly injured; besides, the damage done ur crops by such inundations is incalculable.

* * * * * * * * * *

t is known that freights on Red river are two hundred per cent. higher than on y other river on our continent, and all on account of the raft. We pay upon h bale of cotton that we ship to New Orleans from any point above the raft, m two and a-half to five dollars, and the freights on every thing else are pro-tionably high. How different, then, is our situation from that of our neighbors the Ouachita river, some seventy miles from this. They pay from fifty cents one dollar per bale for about the same distance. We would also further state, at the distance from many points at which cotton is shipped, at the enormous ights mentioned to the foot of the raft, varies from fifty to two hundred miles, d that cotton is shipped from the foot of the raft at one dollar per bale, and from reveport, forty miles below that point, it is shipped for from fifty to seventy-five nts per bale.

* * * * * * * * * *

The river is now completely blocked up for a great distance, and the water is ggish and almost stationary in the raft region; and when there is accumulation f water from the heavy rains, it must seek and have an outlet, and when it capes from its natural course it runs over the country on either side of the river, for any miles. This would not be the case if the channel or bed of the river were pen, so that the water could pursue its wonted course. If the raft could be once moved, and kept out for three or four consecutive years, we have no doubt but e constant washing of the current would widen the river and deepen the channel, d in a few years those fine lands now subject to overflow and lying idle, would e reclaimed, and speedily purchased from the Government. In making an ppropriation, therefore, our Government would in reality be selling its wild, and t present, worthless lands. * * * * * * Furthermore, e major portion of the land bordering Red river and its tributaries, are now, in nsequence of its obstruction above referred to, waste, and comparatively value-ss, and will continue so until the raft is removed, and those inundations of Red ver and its tributaries are obviated; and so long as the raft does remain, these quent overflows in our rivers may necessarily be looked for, and while such undations continue there will be no lands sold that are at all affected thereby. support of this view of the case, we can state that Capt. Shreeve was appointed y the General Government to superintend the removal of the raft, and that he cceeded in cleaning out about one hundred and sixty-five miles of it, and all the e lands bordering that part of the river were reclaimed thereby, and were readily d by the Government, and there are now flourishing towns and villages, where ere was nothing but a wilderness when Captain Shreeve commenced the work.

COMMERCIAL JURISPRUDENCE AND POLITY.

REVISION OF THE LAWS OF LOUISIANA.

Of all the sciences, none are more progressive than what Burke calls "the blest of them all"—the Law. From the simple and wise commandments God to Moses amid the thunders of Mount Sinai to the huge tomes of Cujas, we ceive the necessity of an almost every day addition to the pages of the Statute ok. As long as mankind remained in that primeval ignorance and simplicity h required only the twelve tables to rule them, and which were made the *a necessarium* of the early Roman Youth, there was little use for the more n two million of points decided in the common law alone at the present day; the infinity of reports that stand on our shelves in inglorious repose, because rruled by later law. But since the Augustin and the dark ages, a great change s come over human nature. The press, steam and electricity have opened rees of information and communication that has made nations neighbors almost heard of before. Profit, hawk-eyed, has sought far-off people, and talked with m of barter as with *familiar faces and tongues*; and thus a thousand avenues ve been *opened for intelligence and knowledge* that the Christian era never knew before; and thus, from the force of circumstances, has Law spread more wide her protecting wings, and more kindly does Themis smile from her shrine, as knowledge and civilization advance. The rude Baron no longer rips open the bowels of his Serf, wherein to warm his shivering feet! and even later, the starved fellow-man is not hung upon the gibbet for the stolen loaf. Mankind have ceased to think of the laws of retribution only, and employ their intellects in adjusting the scales of justice in the vast and comparatively new field of commercial and maratime adventure. Human nature ceases to be blood-thirsty and studies equity. She turns her before gloating eyes from the gaol, the penitentiary and the gallows, and looks upon the fair proportions of the temple of justice reared by the enterprise of the nineteenth century. The contests now are on the civil lists, and are carried on in a spirit of amity, a conception of right, and a sum of knowledge in the mass that characterises the progress of intelligence. These observations occur naturally to us as we see at the levee of the embryo greatest mart of the world the flags of every nation. Tyre and Sidon of old did not compare with the prosperity of N. Orleans; and ere long, the docks of London and New York will exhibit a less number of tall spars. The canvass of every nation, kindred and people spreads out upon the gigantic Mississippi; steam-propelled palaces swarm at her banks. and upon her wide swelling bosom are even now floating the wealth of empires. Then what a variety of new obligations, expansive views and vast influences of which the Law must take cognizance in the commercial State of Louisiana? And what are the responsibilities of our legislators in making our statutes conform to this new order of things? Expunge the obsolete in practice and theory, and re-model the practical to suit our exigencies! The task, to be sure, of Hercules in cleansing the Augean Stable will assimilate to such a duty, but the reward of a grateful world will be the recompense. Make laws to suit the times. Revise them by cutting down the weeds that have grown around the structure and hide its goodly proportions. We have now a civil code framed upon the elements of pure justice. Roman, Spanish, and French jurisprudnce have combined to form and elaborate it. Yet much of it might be repealed at this time, and under our peculiar organization with as much safety as were the *Contumes de Paris* and others on the appearance of the *Code Napoleon*. Who among our jurisconsults, (and it is our pride that we have some of the best in the Union,) can delve into our law of successions with any more certainty of his finding his way out than he would in threading the labyrinth of Crete? Who would not believe that ships and other vessels can be mortgaged when the Code (article 3256 tells him so? Yet article 3272 and a number of decisions of the old Supreme Court say to the contrary! (7 L. R. 488, 17 L. R. 158, 2 R. 89, 5 R. 49 & 475.) When one Supreme Court decides that no person can be held to bail, or imprisoned, or kept so on civil process after judgment under the act of 1840, (Thornhill *vs.* Christmas, 12 Rob.,) and another Supreme Tribunal of our State decides the contrary, as in the case of Anderson *vs.* Brinkley, 1 Ann. R., what shall we do? Especially as Sir William Jones, in his excellent work on Bailments, says that, quoting the opinion of Mr. Justice Powell, who emphatically said, (and this is a hint to those who think their own common sense is law.) that "nothing is law that is not reason;" a maxim, says Jones, "in theory excellent but in practice dangerous, as many rules true in the abstract are false in the concrete; for since the reasoning of Titius may and frequently does differ from the reason of Septimius, no man who is not a lawyer, would in many instances know what to advise unless courts were bound by *authority* as firmly as the Pagan deities were supposed to be bound by the decrees of *fate*.

S. F. G.

JOURNAL OF FINANCE AND BANKING.

UNITED STATES TREASURY, 1847.

THE elaborate and luminous report submitted by the Secretary of the Treasury, December, 1847, commands our admiration for the ability with which it is *marked, and the strong* practical views it presents. A brief view of some of the principal points it enforces and an imperfect sketch of the arguments it elaborates is all we can make at this time.

The Report starts out with an exposition of the amount of receipts and expenditures for the fiscal year ending 1st July, 1847.

Total receipt, including loans, - - - - - - - - - - - - - - - - - -	$52,025,990 82
Balance in Treasury 1st July, 1846, - - - - - - - - - - - - - - - -	9,126,439 08
Total means, - - - - - -	$61,152,428 90
Expenditures during the same fiscal year, - - - - - - - - - - - -	59,451,177 65
Leaving a balance in the Treasury, 1st July, 1847, - - - - - - -	$ 1,701,251 25
The estimated receipts for the fiscal year ending the 30th June, 1848, are -	34,900,000 00
Avails of Treasury Notes and loans, - - - - - - - - - - - - - - -	6,285,294 55
	$41,185,294 55
Add balance in Treasury July 1st, 1847, - - - - - - - - - - - - -	1,701,251 25
	$42,886,545 80
Expenditures, -	58,615,660 07
Excess of expenditures over means, 1st July, 1848, - - - - - - -	$15,729,114 27
The estimated receipts for the fiscal year ending the 30th June, 1849, deducting the deficit on the 1st July, 1848, are - - - -	19,370,885 73
Balance former appropriations and specific appropriations asked for this year, -	$55,644,941 72
Deduct means remaining applibable to service of fiscal year, ending the 30th June, 1849, - - - - - - - - - - - - - - - - -	19,370,858 72
Excess of expenditures over means 1st July, 1849, - - - - - - -	$36,274,055 09

Deducing his arguments from the data above, Mr. Secretary Walker proceeds to show that with no addition to the revenue the amount of $15,729,114 27 will be required on the 1st July next, to meet the current expenditures of the Government, to which must be added $3,000,000 as necessary at all times to be held available in the Treasury. He is clearly of the opinion, however, that a duty of twenty-five per cent. ad valorem upon coffee and tea would yield to the Government a yearly revenue of $3,000,000, to which, if we add the excess which would result from the reduction and graduation of the price of public lands, $1,000,000, and the extention of the rights of claimants to pre-emption, $5,000,000, would in the aggregate be an addition of at least $4.500,000.

The various modes by which contributions may be levied, sanctioned by the laws of nations and adopted by the President, to draw supplies for our army in Mexico, are next explained and enforced with much clearness and perspicuity. Without reliable information as to the amount collected by Mexico for duties upon imports and exports, the fact is presumable that a scale of duties, such as would be enforced, would produce a larger amount of revenue than the Mexican tariff, which was entirely prohibitory and protective in all its features. Nor would it be the policy of our government to exclude the importation of coffee, nails, leather, flour, cotton yarn, lard, and a variety of other articles, amounting in all to sixty and over, which, under the Mexican tariff, were altogether prohibited. A reasonable duty upon these articles; the substitution of a revenue for a protective tariff and the abolition of the heavy transit charges, it is argued would largely increase our trade with Mexico and bring back to us returns in specie for our exportations. With this system in full and effective operation, it is not doubted the amount of revenue collected would attain to, if it did not exceed the amount collected under the Mexican system of duties, estimated from imperfect data at from 6 to 12,000,000 on imports simply. This estimate, however, is based upon the presumption that all the ports of Mexico should be kept in a state of blockade, and the roads opened through to the city of Mexico, with the route rendered secure across the Isthmus for the free passage of our commerce.

The internal revenue of Mexico *is estimated* at $13,000,000 annually, an amount *exceeding, what under our system of* military contributions would probably be reached. It is supposed, however, that it would be continually augmenting as our forces secured a more complete possession of the country. In view, then, of the increase to the revenue, resulting from a duty upon tea and coffee, &c., and from the contributions to be levied in Mexico, an appropriation of $18,500,000 is only asked for, though a much larger amount would be clearly required by the 1st July, 1849, should either of these sources fail in producing the amount expected, or should the war be continued to that time.

We pass over that part of the Report devoted to the reduction of the price of public lands, surveyed as well as those now in progress of exploration, the measures effected to secure to our army in Mexico the grants made to them by the government, and the establishment of ports of entry in Oregon and the extension of our revenue laws in that section, and come at once to the arguments advanced in support of the Constitutional Treasury, as the proper agent for disbursing the government monies. It will not be denied, we presume, that a state of war is the one best calculated to develope the capacities of such an agent. During the last eleven months, the receipts in specie for loans, customs, lands and miscellaneous collections, amounted to the sum of $48,667,886 18, and disbursed during the same period, the sum of $48,266,516 31. Under our old system, it is argued, this amount would have been placed in the State Banks to have been made the basis of paper issues to an extent more than double its amount. This expansion in our currency would necessarily have inflated prices beyond the point to which they attained, and upon its withdrawal a necessary contraction of paper issues would have taken place; prices would have fallen, and, coupled with the diastrous condition of the affairs of England and the bearing they necessarily have upon our country, would most likely have produced much confusion, if not absolute failure and bankruptcy to many of our wealthiest merchants and corporations. Should these last have suspended, the effect would have been manifest in the depression of the wages of labor and the prices of property and products. From this, it is contended, we have been in a great measure saved by the Constitutional Treasury. The specie required by the government has gone into the circulation of the people, and instead of being placed in the banks as a basis of loans to their customers, is transferred from New York to New Orleans, without affecting the business or monetary interests of our country. For the first time in our history, the most unprecedented panic and disastrous results in the English money market has failed to produce any corresponding effect in our own. Our merchants and banks are in a healthy and prosperous condition, and the general business of the country sound and progressive.

The amount coined from 1st January last to 1st December, was $20,758,048 12, of which $3,955,085 80 was coined in the month of November, 1847. The large amount of foreign coin received in New York for eleven months from 1st January last, amounting to $29,904,741 19 is urged, and with much reason, as an argument for the establishment of a Branch Mint in that city. By recoining at our mints all the foreign coin which finds its way into our country, would, after a time, Americanize the coinage of the world, and substitute for the complex system of £ *s. d.*, doubloons, ducats and rupees, which complicate accounts and retard business, the beautiful and simple system we have adopted, of a decimal currency. This system, it is believed from its perfection and simplicity, will ultimately be apopted by the nations of the world.

Passing over the explanations in regard to the $3,000,000 Treasury notes, we are brought to what more intimately relates to New Orleans, the "munificent donation," *made by the First Municipality*, of Customhouse square to the government. This property, Mr. Secretary Walker estimates at $500,000. When it is known, what this Report so positively affirms, that large amounts have been been paid by the government for the ground upon which other Customhouses have been erected, it is a source of proud satisfaction to us, that so extended a liberality should have pervaded the citizens of this municipality.

The Warehousing System next claims the attention of the Secretary, and is treated in a manner which evidences a close study and intimate acquaintance with his subject in all its details. In Great Britain it is most perfect in its operations, and is shown to be one of the principal means by which she has been enabled to extend her commerce over the entire habitable globe. The value of goods of all kinds in warehouse in London, is stated at $387,200,000. The structures themselves, erected by private enterprise, is estimated to have cost $40,000,-

400. By this means customers are brought to the very doors of England for the manufactures of other nations as well as her own.

Having followed Mr. Walker thus far in his Report, we are brought at once to the arguments he advances in support of a revenue as opposed to a protective tariff. And as opinions are so variant among all classes of men with regard to the operation of this law, we shall confine ourselves entirely to a recapitulation of the points he has sought to enforce, in which we trust to do him full justice, without committing ourselves to the opinions he has advanced, or the deductions he has made to result from the facts established.

In the Report of the 22d July, 1846, the annual value of our products was placed at three thousand millions of dollars—double, we believe, what it was in 1840—and it is upon this data and our census returns, we presume that our population is calculated to double in every twenty-three years, and our products quadruple in the same period. We were not prepared for this astounding development of the increase in our productive resources. Of this 3,000 000 000 but 150 000 000 is exported abroad, leaving for home consumption, 2,850.000,000, of which 500.000,000 is the amount assumed as being annually exchanged among the States of the Union. Our imports and exports with all the world is now placed at 300.000.000, having, under the operation of the new tariff, increased during the last year 100,000,000. The exchanges in home products in our own country is made to bear the proportion of $23 81 per individual, while our exchanges with all the world is shown to be 30 cents to each individual; or, to use its own emphatic language, one person of the Union receives and exchanges annually of our own products as much as 79 persons of other countries.

Should our exchanges with foreign countries extend to 90 cents per head, our imports and exports would be 900 000,000. and our revenue amount to 90.000,000. An increase in the consumption of our products in the United States to the extent of 30 cts. per head, would afford an increased market to the extent of $6,300 000, while the same increase throughout the market of the world, based upon the population of each, respectively, would give us a market for 300'000,000. From this it is argued, that should we demand specie in exchange for our products, the demand, from the necessities of the case, could not be complied with, while by receiving the products of other nations in return for our own, the trade might be augmented to the extent assumed.

To establish the fact that it is not the freight which prevents our freer interchange with foreign countries, though from many sections of our Union to others this charge is greater than from our seaports to England, it is affirmed that Canada, with a population of two millions, consumes less of our products than the State of Connecticut, with a population of only three hundred thousand. The cost, then, must create the vast difference which is here manifest. In the diversity of products is to be found, in a great measure, the demand which exists for an interchange between State and State, and with our own and foreign countries. Should England and America be united by a system of absolute free trade, it is contended that our commerce would, in a very short time, exceed the present foreign commerce of both. The home market, it is clearly evident, is not sufficient for the consumption of our agricultural products. The last year was one well calculated to develope the vast resourses of our country in this particular branch of industry. In breadstuffs and provisions alone, our exports amounted to 41.332.282 in addition to the previous year, augmenting the exports of that year to $63,998,273. This surplus could not have been consumed by our manufacturers, and if at any time we can add to our exports the amount here stated, what it, is asked, would we be capable of doing with the markets of the world thrown open to us?

We are not prepared to dispute the position which is sought to be maintained, that the amount of labor performed by the American freeman, over that of the English operative, compensates for the difference in wages. The fact may be so. It is only just that labor should reap its full reward, and this, it is affirmed, is the result under the operation of the new tariff law. The mode adpoted by New Mexico in placing a duty of $500 on every wagon load of goods, he conceives the most perfect model of anti-advalorem duties. This was assessed irrespective of cost.

For the statistics drawn from the records of the Department, showing the excess of our imports of specie; our exports of domestic products, exclusive of specie, the increase in our tonnage during *periods* when high and low tariffs were in operation *in our government, as compared* with each other, as well as the arguments deduced therefrom, we would call the attention of the reader to the Report itself. These, Mr. Walker esteems not as arguments simply, but as affording mathematical proofs of the position he assumes: that "a tax or restriction on commerce is a restriction or tax on labor, and falls chiefly upon the wages of labor," and that "it will soon become an axiomatic truth, that all tariffs are a tax upon labor and wages."

We have thus sketched the leading features of Secretary Walker's Report. It presents all the evidences of labor and research. Whatever differences may be found in the minds of men with regard to the doctrines, this may be at once conceded, they are stated with clearness and defended with ability. Being placed before the American people, it will be for them, in their sovereign wisdom to determine, how far these doctrines are capable of application—not for us in this place to solve the political problems evolved.

AMERICAN AND FOREIGN TRADE AND STATISTICS.

The annals of England present no parallel to the commercial embarrassments with which this unhappy country has been afflicted during the past year, whether regarded in point of duration, the extent of bankruptcies occasioned, or the deterioration manifest in every species of property. The call by the Ministry for a meeting of Parliament, which assembled on the 18th November, has doubtless for its object the consideration of the "Currency Question," no less than the condition of devoted Ireland. Ghastly famine threatens to revisit the homesteads of a people, already marked with the foot-prints of want and desolation.

The late intelligence per "Britannia," furnishes the first ray of light which has penetrated the dark cloud so long suspended over the commercial affairs of England. If, as is so frequently affirmed, consols are the barometer by which to test the financial condition of the country, we are not left to idle speculation for the inferences which justify a restoration of credit and improved condition of trade. These government securities are quoted at 84 1-4, the decline of 3-4 from the day previously, being probably influenced by the chances of a civil war in Switzerland. Ten days anterior they were worth but 80. Happily, we are not without other grounds to favor the re-establishment of public confidence, so much required to give healthful tone and action to the monetary concerns of the nation. These indications are to be seen in the *advancing* prices of our cotton and breadstuffs, and the increased activity apparent in the manufacturing districts. The depression in the price of cotton after the advance had taken place, resulted clearly from the fact that the accounts from this side gave higher estimates of the crop, now ready for market, than any previously received, and not from any action of the English money market. This fact is also apparent in a review of the Havre market, where the effect upon prices was felt in a depreciation upon ordinary grades.

The deputation of London Bankers waited on the Ministry the 23d October last, with the view of enlisting the aid of the government, so far as its partial action in the matter could effect the purpose, in restoring public confidence and of infusing greater stability into the operations of trade. To this are we probably indebted for the privilege granted to the Bank of England of extending her discounts beyond the limits of the charter. Had the deposites been removed from the Bank, as was threatened, on the day after this conference took place, it is not difficult to conceive the situation in which the "Old Lady of Threadneedle street" would have been placed. Suspension would have naturally resulted, and the prediction attributed to Mr. Horsley Palmer would have been strikingly verified. This result must be apparent to all.

The government authorized the Bank to relieve the wants of the merchants, under the promise of a "Bill of Indemnity," but opposed any reduction in the rate of interest. We are not of those who place their faith in the Bank of England as the proper agent for relieving the wants of the people in times of great commercial embarrassments and disaster. Its history for the last six months gives the clearest, as well as the strongest evidence of this fact, and we are forcibly driven to the conclusion, that she is no more the great support of the credit of nation than is the Bank of Amsterdam the source whence all our circulation derived.

To what then are we to attribute the restoration of confidence which has measurably taken place? We answer, to the *privilege* extended to the Bank of England to make loans to an amount beyond what its charter authorizes. Not that these discounts have been taken by the Bank, for we have the data before us which establishes an opposite conclusion, but in the influence of the measure which has served partially to allay the public mind and quiet the apprehensions which have so long agitated it. We do not affirm that a rapidly improved trade and stability in commercial intercourse will speedily follow. The elements have not yet become composed. Clouds, dark and gloomy, continue to hang over the commercial horizon, and their aspect is not less portentous and threatening than they were. It is one thing to tranquilize a feeling — it is another to subdue and crush it.

Though it followed the suggestions of the Minister with regard to the rate of interest, the Bank of England is said not to have extended its discounts, but on the contrary to have acted with a view to its own aggrandizement and protection, irrespective of the wants of the people or the requirements of trade. The establishment of this position is to be found in the fact of its having at the time the recommendation was made, less than £8,000,000 in bullion, and only £1,000,000 in its reserve of notes. Twenty days after, it was shown to have in bullion nearly £9 000 000, and the reserve of notes amounting to nearly £3,000 000. Anterior, and for a long time subsequent to the suspension of the Bank in 1797, which continued for nearly a quarter of a century, the rate of interest ruled much lower than at present, though the political aspect of affairs was dark and troublous. John Francis in his history of the "Bank of England[1]" with regard to its conduct at this time in curtailing their discounts makes the following remarks: "Many competent persons have been persuaded that the decrease of the circulation from 1795, so far from preventing what is properly known as a run on the Bank, possessed a contrary tendency. They asserted that, by reducing the requisite issue and diminishing the general accommodation, a pressing demand for specie was occasioned. This idea is supported by the fact, that, from March, 1792, to June, 1793, there was a drain of cash and bullion considerably larger than in the same period during the crisis; but, *instead of lowering, the Directors raised the amount of their discounts, and an almost immediate result was an increase in cash and bullion.*"[1] This, we conceive, amounts almost to a demonstration.

During the financial crisis of 1825, when firms of the most unquestionable solvency and the strictest honor fell before the storm, the interest charged by the Bank of England was but 5 per cent., and we have the best authority for the assertion, that Bankers, forced to the necessity of sales of stock, submitted to a loss of 72 per cent.

With 8 per cent. as the minimum rate of interest charged by the Bank, and an additional one per cent. by all its branches, we are left entirely to conjecture for a solution of the great question, why these discounts were not effected? Was money so cheap, that those who have heretofore submitted to the most usurious interest and the most alarming sacrifices for its possession, were unwilling to pay it? Could it otherwise be obtained at a cheaper rate? We are assured by Messrs. Baring, Brothers & Co., that it could. What then is the corrollary resulting from the argument?

There are but few men in this country, we believe, who have reposed any confidence in the arguments of those who advocate the "anti-gold league" system of controlling the monetary affairs of a nation. To substitute exchequer notes of any denomination for gold, as the basis of a legal currency, is an expedient we would have conceived too perilous to have entered into the imagination of any man. Yet has even this project found its advocates. It strikes us with some force that this would be carrying the paper system to an extent measurably far beyond what we could have supposed any condition of things would have warranted. But if Mr. Huskisson, during the financial crisis of 1825, could advise the governor and directors, when they suggested an order in council to restrain specie payments, "to place a paper against their doors, stating they had no gold to pay with, but expected it shortly," and this body could entertain so extraordinary a proposition, in the excitement of a crisis like the one through which we trust the English *nation will now soon pass*, to what expedients may we not *suppose them capable of being driven.* — *It* is contended by some that it was "a wise precautionary measure" to maintain the rate of interest at 8 per cent. We admit our utter incapacity to discover the mode of reasoning by which this conclusion is reached. It must be apparent, at a glance, that England is shackled and restrained in her commercial intercourse with other nations, to such an extent as the rate of interest which prevails with her, exceeds that of the continent—which at the present time is about equal to one half. By means of her Exports, she is expected to discharge her foreign demands; and with this advantage, to speak of no other now operating against her, is it not plainly evident her export trade must be confined to a very narrow compass? We have already seen that the manufacturers are unwilling to engage largely in the production of fabrics while this state of things is continued; and the Bank of England has itself furnished us with one of the strongest arguments in support of the determination of the merchants to cease operations, rather than submit to the exorbitant demands which are made upon them in the shape of interest upon loans. If the mania for railroad investments is as strong as ever, a fear may be entertained that, should the rate of interest be lessened, much of the funds drawn from the Bank will be appropriated to this purpose. But we have more confidence in the practical good sense of the English nation, than to believe that the experience which they have gathered this year, will not exert its influence to prevent a recurrence of the calamities with which they have been so sorely visited. The remark has been made to us, and it has been confirmed by our own observation, that it is impossible so soon for the English nation to recover from a revulsion like the present, as the people of the United States. In the American character there is an elasticity of mind, and an energy of purpose, which enables it to overcome the most formidable obstacles—to resist the most powerful difficulties

When we view this question in all its bearings we cannot but be astonished at the results which are developed. We see a nation in the possession of property to the value of fifty thousand millions of pounds, forced to the necessity of supplicating for foreign loans—her commerce languishing and almost in ruins—her "merchant princes" reduced to bankruptcy—her manufacturers either broken down or suspending operations—and her operatives in a state of helpless destitution—and to what is this ascribed? By some, to the investment in railroads to the extent thus far of two hundred millions of pounds; by others to the heavy demands made upon the country in the shape of coin for her importation of breadstuffs; while by a great many to the combination of these two causes, is it attributed.

It is unquestionably true, that public confidence is one of the highest elements of national credit. Disturb for a moment the functions which it performs in the political economy of a state, and the mischief produced will be almost incalculable. That the amounts invested in railway shares were heavy, is admitted on all hands; but that the amount was drawn exclusively from the legitimate pursuits of trade and manufactures, is, we think, affirming rather too much. Nor do we esteem the fact of the importation of gold into the kingdom is an evidence of returning prosperity, but rather in the light of a premium offered to a neighboring state for the investment of her surplus capital. Without a very strong inducement, it is scarcely to be supposed the project would be entertained, much less would it be consummated—gold being as much a commodity as cotton, corn, or tobacco.

The impression that there is a vast deficiency of currency in England at the present time, and that any new issue of government securities would be speedily consumed in the demand for instalments to railroad stock, we regard as possessing very little weight, and deserving of less confidence. We have already shown that the privilege afforded the Bank of England to extend its discounts, has exerted an almost charmed influence upon the general aspect of affairs, by the confidence which it has infused into every department of commerce. Is it not natural, then, that we should hail it as the indicia of a prosperity not soon again to be disturbed?

We have thus given our crude notions of what we conceive to be the present aspect of financial affairs in England. The subject has been treated at length in an able article in the December number of our Review—to which we would call the earnest attention of the reader.

The following is the last.

WEEKLY STATEMENT OF THE BANK OF ENGLAND.

Account for the week ending November 6:

Issue Department.

Notes issued,	£22,426,530	Government Debt,	£11,015,100
		Other securities,	2,984,900
		Gold coin and bullion,	7,247,959
		Silver Bullion,	1,178,571
	£22,426,530		£22,426,532

Banking Department.

Proprietors' Capital,	£14,553,000	Government securities, (including dead weight annuity,)	£10,598,607
Rest,	3,581,247	Other Securities,	19,919,915
Public Deposits, (including Exchequer, Savings' B'ks, Commissioners of Nat'n'l Debt and Dividend Ac'ts.)	4,991,313	Notes,	3,030,085
Other Deposits,	8,804,395	Gold and Silver Coin,	303,021
Seven Day and other Bills,	921,673		
	£32,851,628		£32,851,628

M. MARSHALL, Chief Clerk.

Dated the 11th of November, 1847.

The above accounts, compared with those of last week, exhibit:

A decrease in circulation of	£443,997
An increase of rest of	43,428
An increase of bullion of	290,677
An increase of Public Deposits of	295,281
A decrease of other deposits of	107,047
A decrease of Government Securities of	15,000
A decrease of securities of	489,982
An increase of reserve of	853,345

We have before us a letter addressed to the Augusta (Ga.) Sentinel, by J. H. Dent, Esq., under date of the 6th November, upon the cotton crop. He says that in New York the crop is variously estimated from 2,000,000 to 2,400,000. In 1845 they contended, from the most reliable information, held by them, that the crop would reach 2,000,090 bales. The result proved it far below their figures, and great loss was sustained by those who reposed confidence in their estimates. His facts he deems incontrovertible, but leaves it to those interested to deduce their own conclusions.

Texas, Louisiana and Mississippi have had favorable seasons, and the crop in these States will be full. Up to the 1st September, in South Carolina, Georgia, Alabama and Eastern Mississippi, it was subject to continued disasters; the season since is said to have been favorable. In June, July and August, the crop in these last, the largest producing States in the Union, has had to contend against drenching rains, which injured it seriously, and in August the boll worm appeared to add to the existing difficulties. The favorable September, then, is relied upon to atone for the disasters of the three previous months, undeniably the most favorable months of the year. In addition to this, a very heavy provision crop has been made, and the planters were reported to have been up with their pickings at the date of the letter. With heavy crops, in November and December, the fields are snow-white—no such sight was seen even in November.

Taking the crop of 1844 as a basis he proceeds with his estimate, giving to Louisiana 1,000,000 bales as the receipts of the port the present year, including Texas, and 1,099,033 those of the States east of the Mississippi. Allowing an increase of 50,000 bales for the total increase in the crop would swell the amount to 2,149,033 bales. In view of what has been previously stated, and that in Virginia and North Carolina the culture of *cotton* has been curtailed by substituting other crops, and *much land diverted from the* cultivation of cotton to sugar, it is *supposed that this estimate will prove a very* correct one. **We incline strongly to** *the opinion that the figures are too low.*

In the Commercial Summary made up by the New York Courier and Enquirer, for the British Mail Steamer, "Brittania," 2,300,000 bales is put down as the prevailing estimate, with little reason to doubt that it will exceed 2,200,000 bales.

We give below the monthly statement of the supply and stock of sugar and coffee in cwt., in the six principal markets of Europe, for three years, to 1st November, 1847:

	SUGAR.			COFFEE.		
	1845	1846	1847	1845	1846	1847
Holland, - - -	140,000	70,000	117,000	525,000	568,000	314,000
Antwerp,- - -	111,000	68,000	72,000	103,000	48,000	92,000
Hamburg, - -	150,000	140,000	130,000	150,000	130,000	125,000
Triste.- - - -	106,000	172,000	160,000	57,000	64,000	60,000
Havre,- - - -	95,000	90,000	100,000	21,000	28,000	34,000
England,- - -	1,059,000	1,359,000	2,283,000	420,000	444,000	312,000
Total, -	1,661,000	1,889,000	2,862,000	1,277,000	1,282,000	9,377,000

Of which there was of Colonial sugar in Great Britain, in 1845, 771,000 cwt.; in 1846, 867.000, and in 1847, November 1st, 1,485.000. The decrease in the consumption of coffee in England is thus made apparent, and is accounted for on the ground of the large quantities of tea which enter into the consumption of the people. Unlike the United States, the latter article is consumed to a much greater extent.

I.—CHINA.

The commerce of China with the United States has been yearly progressing and is probably at this time of greater magnitude than that of any other nation, if we except Great Britain. Under a system of commercial intercourse, such as at present exists, we may reasonably argue a larger augmentation of our annual exports, than when specie was required to perform those functions which our domestic manufactures may be made to supply.

EXPORTS TEA,	1st *July*, 1846. *to May*, 1847.	1845 *to* 1846.
Young Hyson, - - - - - - -	8,583,135	8,101,486
Hyson, - - - - - - - - - -	754,243	838,221
Hyson Skin, - - - - - - - -	1,980,199	102,186
Twankay, - - - - - - - - -	1,071,286	263,000
Imperial, - - - - - - - - -	956,304	819,876
Gunpowder, - - - - - - - - -	1,334,472	1,202,674
Souchong, - - - - - - - - -	3,066,466	3,266,130
Pouchong, - - - - - - - - -	433,412	738,664
Pekoe, - - - - - - - - - -	750,368	731,006
Orange Pekoe, - - - - - - - -	173,350	......
Oolong, - - - - - - - - - -	542,933	198,704
Green, - - - - - - - - -	14,679,718	13,149,239
Black, - - - - - - - - - -	4,968,558	3,228,304
Total, - - - - -	19,648,273	16,377,543

II.—BOSTON.

The following statements exhibit the domestic cotton goods exported from Boston for the North, ending the 30th November, and the countries to which they were shipped:

	BALES AND CASES.	VALUE.
Hong Kong.	300	14,479 25
Madras and Calcutta,	100	4,246 33
Colombo, Ceylon,	97	5,162 12
Rio de Janeiro,	293	14,698 90
Montevideo,	15	852 00
Goree Africa.	29	2,275 18
Sisal,	70	4,034 00
Curacoa,	1	60 00
Vera Cruz,	43	4,757 50
Port-au-Prince,	10	1,055 00
Balize,	36	1,863 00

The ice trade forms an important item in the exports of Boston, and is yearly increasing, though, if our memory serves us, the Secretary of the Treasury has not brought it into his estimate of the exports of the United States. New Orleans is shown to be by far the largest consumer in this country. We give below the imports of produce for the past year ending 31st August, 1847:

COMMERCE OF BOSTON.

Flour, bbls.,	842,523	Coffee, bags,	220:057
Corn, bushels,	1,910,546	" piculs,	10,700
" sacks,	144,724	Hemp, tons,	506
Oats, bushels,	562,804	" bales,	41,266
Rye "	63,758	Hides,	332,849
Corn Meal, bbls.,	11,750	Lead, pigs,	131,793
Rye flour,	3,362	Molasses, hhds.,	79,537
Wheat, bushels,	140,754	" tierces,	4,490
Coal, tons,	221,412	" bbls.,	1,571
" bushels,	126,800	Sugar, boxes,	69,158
" chaldrons,	39,064	" hhds.,	9,766
Cotton, bales,	222,075	" bags,	36,554
Oil, whale and sperm, bbls.,	321,221	" bbls.,	8,765
Rice, Casks,	8,572	Tea, packages,	71,759

III.—ROCHESTER, N. Y.

The commerce of this thriving and populous city, situated on both sides of the Genesee river, and only incorporated in 1834, exhibits annually a marked and decided improvement, owing its rapid growth to the advantages of a plentiful supply of water power. The capital employed in its flouring mills may be estimated from its requiring $3,000,000 to 3,500 000 annually to keep them in operation. In 1812 it was represented as a "God-forsaken place, inhabited only by muskrats, visited only by straggling trappers, through which neither man nor beast could gallop without fear of starvation or fever and ague."

During the last three years, for five months—from April to November inclusive—the quantity of flour shipped East by the Erie Canal was, for 1845, 518,318 bbls.; for 1846, 540,232 bbls., and for 1847, 588,080 bbls., showing a gradual increase in each year. The sources whence she derives her supply of wheat are five, viz: Erie Canal, Genesee Valley Canal, Tonowanda Railroad, Lake Ontario and from the adjacent country, by wagons. The amount of bushels received in 1847 was 1,879,110.

IV.—NEW YORK.

Amount of Tolls received on State Canals in each of the following years to Dec 1st.

The article upon New York in our present No. furnishes such complete information upon all points touching the commerce of this great metropolis, we have deemed it unnecessary still further to extend the subject at this time.

1840,	1,773,582 51	1844,	2,446,037 91
1841,	2.033,261 77	1845,	2.646,117 55
1842,	1,748,869 88	1846,	2,754,467 25
1843,	2,082,145 60	1847,	3,634,847 53

The tolls received at Buffalo, for the navigation season to the 1st inst., amount to the sum of $1,216,900 96.

V.—PHILADELPHIA.

The increase on the duties collected at the custom house since 1846, up to Nov. 1847, is about $480,000—the total amount collected up to that time being stated at 2,728,462. The exports of breadstuffs alone, from 1st January to 1st December 1847, were as follows:

	Barrels.		*Barrels.*		*Bushels.*
Flour,	413,138	Rye Meal,	21,877	Wheat,	530,266
Corn Meal,	296,491	Ship Bread,	37,109	Corn,	1,091,104

The value of the exports in November, 1847, were $225,110, confined principally to breadstuffs; though we notice in the enumeration of articles, 490 bales of cotton, 2,165 barrels naval stores, and 650 bales of domestics.

The following is the supply of coal received in Philadelphia this season:

	Tons.
Lehigh Company,	633,635 04
Reading Railroad,	1,256.567.17
Schuylkill Canal,	228,318 04
Delaware & Hudson Canal,	346,649.9
Total,	2,465.370 04

THE PUBLISHING BUSINESS.

Cyclopædia of English Literature.—A selection of the choicest productions of English authors, from the earliest to the present time, connected by a critical and biographical history. Edited by Robert Chambers. Boston, published by Gould, Kendall, & Lincoln, No. 59 Washington street, 1847.

Chambers never published a poor or useless work. Most of their publications are of such a popular, suggestive and informing stamp as to be, what this is emphatically, libraries in themselves. As a volume of reference, it will assist the most finished scholar in his search for some particular passage; while the man of business can in it find a fund of information on subjects wherein ignorance is peculiarly awkward and annoying. If we were the father of a family, rich or poor, next to the full works of the great names of English literature, we would choose this valuable Cyclopædia of those illustrious many, whose minds have labored so nobly in framing the thoughts and moulding the sentences of our bold and free Saxon tongue. A language that in copiousness and force, in lessons of liberty, in magnificence of poetry, in depth of philosophy, yields not a whit to Greek or Roman fame. From Chaucer to the writers of the present day, all of any eminence have a place in the book. It contains sketches of their lives and characters, and a notice of their works, with selections of the best passages. We rejoice that ditor has not made it an epitome of his own literary taste, and meted out rtality to his authors, by sharing his paper and types in direct proportion to merit or reputation. He has pursued a wiser course; we get a taste of all writers of note—and in buying the Cyclopædia, do not pay for a couple of dred pages of Shakespeare, and the whole of the Fairy Queen, and Paradise t, published entire that the editor might be looked on as orthodox in literature.

SKETCHES OF LIFE AND CHARACTER IN LOUISIANA—THE PORTRAITS SELECTED RINCIPALLY FROM THE BENCH AND BAR: BY A MEMBER OF THE NEW ORLEANS BAR.

To write the Biography of the *departed*, is at all times a difficult task: but to ortray the lineaments of *living* contemporary characters, by whom we are urrounded, and with whom we mingle in our daily intercourse, is one of the ighest achievements in literature. Boswell's success argues nothing against this position; for though a blockhead, "who lost his hope of immortality from not having lived at the time that Pope wrote his 'Dunciad," he yet may be said to stand alone. Plutarch, the prince of Biographers, took his subjects from the illustrious dead.

Tested by the canons of impartial criticism, these "Sketches" fall infinitely below some productions the author has previously given to the press. That they have not succeeded, is clearly evident to our mind. We seek in vain to trace one point of resemblance between the characters which he has thus unfitly grouped. Some have been endowed with abilities of the highest order; with philosophical and legal acumen sufficient "to fright" poor common sense "from her propriety;" while from others, the meed of well-earned fame is ungraciously withheld. We would not impugn the motives of our author; we but express the decided convictions of our mind.

We can honor the warmth of friendship, and the ardor of affection, evinced in the tribute to the memory of a school-fellow, in the person of the "ill-fated Nicholson;" but may not our admiration reasonably be damped when, with a savage hand, the scalpel is applied to the lacerated feelings of a venerable Judge, who "sat upon the banks of the Mississipppi, and gave laws to the commercial world?" We care not whether the insinuation be true or false—is it not enough that he is poor, almost blind, and, in the language of our author, "has nearly finished his career," that the buried recollections of twenty years should be revived against him? Is it nothing that he has worn out the best energies of his mind and his body in the service of the State? As God judges us, we would rather never have written a line in our lives, than have penned a single sentence that would have carried a pang to the breast of this excellent old man. We must be pardoned the exhibition of some warmth upon this subject. It is our nature.

We dissent decidedly from our friend, the author, in his estimate of true eloquence, as applied to Mr. Grimes. The style and manner of this gentleman are convincing to such a degree, as to impress his hearers with the conviction that he has said no more than they could have said themselves—the highest order of eloquence with which man is gifted.

In the pursuit to which our friend has devoted his time and his talents, we know but few, if any, better calculated to shine. The profession he has chosen opens a wide field for legal and rhetorical display—and we augur for him a proud and successful career.

SENATE DOCUMENT NO. 407.—REPORT OF A GEOLOGICAL EXPLORATION OF PART OF IOWA, WISCONSIN AND ILLINOIS, BY DAVID DALE OWEN, M. D.

THE diffusion of statistical information in all the great departments of production, natural and artificial, *distinguishes the age* even more than the triumphs of modern science. In an economical point of view, the treasures of the mineral world take rank even over the vegetable. It is to coal and iron that Great Britain owes much of her commercial importance—these are the sinews of trade, and by their potent magic the earth will be spanned by a net work of railways and the sea furrowed by hundreds of steamships. We are proud that although we have comparatively but scratched the surface in developing our mineral resources, we have felt the importance of knowledge of this kind; and that in so many of the States geological surveys have been made as valuable to science, as useful to enterprise.

The field of Dr. Owen's labors was the great lead region of Wisconsin, and the no less important coal of Illinois. This last country, lying on both sides of the Mississippi, belongs for the most part to the palæzoic or oldest fossiliferous formations, that which in the early language of geology was termed the transition rock. The formations of the United States are remarkable for their vast superficial extent. It is here that we find coal basins vast enough, like this of Illinois, to cover all England. Here the elevations and subsidences affected continental tracts, and appear to have been less violent and more general than elsewhere. The cliff limestone, the geological equivalent in mineral and palæontological characteristics of the metalliferous limestone of Cornwall and the Penine Hills in England, here stretches from the Southern shore of Lake Superior to the mountains of Tennessee. When its minerals are fully developed, it will no doubt be adequate to supply the wants of the great empire of the Mississippi Valley.

American History—comprising historical sketches of the Indian tribes, a description of American antiquities, with an inquiry into their origin and the origin of Indian tribes; History of the United States, with its appendiges showing its connection with European history; History of the present British Provinces; History of Mexico; and History of Texas, brought down to the time of its admission into the Union, by Marcius Willson.—This elaborated and excellent work is for sale by Messrs. D. Baker & Co., No. 80 Camp street, whose establishment for works of such merit as the above, as well as that of more fanciful things in books and stationary, we cordially recommend to the public. As regards the work before us, we think it contains a succinct and clear view of the subject stated, and we hope to see it universally adopted in our universities and schools—being also a valuable addition to our private libraries.

The Life of Henry the Fourth, King of France and Navarre: By G. P. R. James, Esq., New York: Harper & Bros, 1847.

No better evidence is required of the interest which will attach itself to the work before us, than that it is the production of one of the most gifted minds of the age. Our time has been so much engrossed by the various duties we are called upon to perform, that we have been unable to give these volumes more than a cursory examination.

The stirring events which occurred during the reign of this monarch, and the influence they necessarily exerted upon the future destinies of France, are familiar to all our readers. As an evidence of the great interest which the author attached to the work, we find the publication was suspended for four years, with the view of availing himself of the materials of the "Lettres Missives" of Henry IV., by M. Bergey de Xivrey—the announcement of which was made about the time this History was ready for the press.

***Campaign sketches* of the war with Mexico, by Capt. W. S. Henry, U. S. A., *with engravings.*—Harper & Bro., New York, 1847.**

erused the pages before us with no little pleasure. Most of the
ive recently been issued from the press upon the subject of this war,
inting in nearly all the characteristics of history. In the one before
spirit of independence which elevates it above the suspicion of "man
at threatens to become the prevailing feeling of the age.

end this work to all who take an interest in the stirring events which
d in Mexico, from the removal of our army from Corpus Christi to
ght battle of Buena Vista.

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EDITOR'S NOTE.

eaders and to the public, without distinction of parties or individuals,
objection, one and all, to wish all happiness and prosperity in the
is before us. We have a common race to run together, and small
s it to him who reaches first the goal, that others are behind. "One
nand I give you, that ye serve and assist," is as good as "love one

begun a *fifth* volume of our Book, and if none object, trust we shall
fiftieth. However, this depends upon the public, not to speak of the
es of health, life, &c., &c.

now our own printing office and material on a large scale, we can
tters this year, it is hoped, to satisfy our desires, which have not yet
publishing the Review. The delay in our December number will
feather in the scale of our future punctuality.

e a variety of able articles on our table, awaiting their time for pub-
he authors will receive our thanks and be patient.

ved in due season, the "New Orleans Miscellany," edited by Dr.
and endeavored to prepare a notice for this number. The work has
shes as it has the well wishes of all.

Hon. Solomon Downs, Hon. H. Johnson and Hon. E. LaSere, accept
thanks for numerous kind favors in forwarding official papers.

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—Page 49, 9th line, for secular read several.

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COMMERCIAL REVIEW.

Volume V. FEBRUARY, 1848. No. 2.

Art. I.—PUBLIC LANDS ACQUIRED BY TREATY, ETC.

PROCEEDINGS BY THE AUTHORITY OF THE UNITED STATES FOR ASCERTAINING AND ADJUDICATING LAND TITLES, AND CLAIMS TO LAND, WITHIN THE FORMER POSSESSIONS OF GREAT BRITAIN, FRANCE AND SPAIN, SUBSEQUENT TO THEIR OCCUPATION BY THE UNITED STATES.

The Board of Commissioners in each district was required to convene for business on or before the 1st day of December, 1805, at their respective offices. Each Board, or a majority of each, when duly organized, was authorized and empowered to hear and adjudicate, "and in a summary manner decide, according to *justice* and equity, on all claims filed with the Recorder in conformity with the provisions of this act:" all such decisions, when finally made, were to be submitted to Congress for their determination thereon." (18)

The Commissioners of the respective Boards were required to hold their sessions until the 1st of March, 1806, without adjournment for a longer period than three days; and, subsequently, "until they shall have completed the business of their appointment;" and to transmit to the Secretary of the Treasury full reports of their decision, signed by a majority of the Board, and designating every claim confirmed by them, and those rejected or disallowed; together "with the substance of the evidence adduced in their support," in order that the same should be laid before Congress at their next ensuing meeting.

The *sixth* section provided for the employment of *an agent* on the part of the United States, before each Board, for the purpose of "investigating and opposing all claims which he might deem fraudulent and unfounded." For the dispatch of business, and for recording Spanish and French grants, deeds, or evidence of claim, a translator of the Spanish and French languages was also attached to the Recorder's office. (19)

The Board for the District of Louisiana appear to have entered first upon the duties of their office. This Board, as first organized, consisted of Clement B. Penrose, *Recorder*, and J. C. B. Lucas and Jas L. Donaldson, *Commissioners*, Thos. F. Riddick, *Clerk*, and Wm. C. Carr, Esq., *Agent* of the United States. Frederick Bates subsequently succeeded as Commissioner.

In the Territory of Orleans, the Board for the Eastern District, as first organized, consisted of P. Grymes, *Recorder*, Joshua Lewis and John B. Robertson, *Commissioners*.

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(18) Land Laws of United States—compilation of 1827: pp. 520, 521.
(19) Land Laws of United States, *p.* 522.

The Western Board, as first organized, consisted of Wm. Garrard, *Recorder*, and Levin Wailes and Gideon Fitz, *Commissioners*; John Thompson was *Clerk*, and was subsequently succeeded by Lloyd Posey.

Thus organized, the respective Boards entered upon the arduous duties of their several offices, which they continued to perform with great fidelity and assiduity for several years, during which they were, from time to time. instructed as to the will of Congress touching such cases as were suspended in their final decision.

At the close of one year, the Commissioners reported to Congress that, under the provisions of the *first* and *second* sections of the act of March 3d, 1805, a large number of meritorious settlers would be excluded from the benefits to which they seemed entitled. For the relief of these. a "*supplimentary act*" was passed and approved April 21st, 1806. By this act it was provided that, all persons twenty-one years of age, or the heads of families, who, prior to the 1st of October, 1800, had commenced an actual settlement, and who had continued in the occupancy and cultivation of the same *three years*, or until the 20th of December, 1803, should be considered claimants within the spirit and intention of the Spanish government, and as such, should be entitled to the confirmation of a settlement right not exceeding one square mile: also, that any person who had remained fourteen years in the quiet possession and occupancy of land prior to the 20th of December, 1803, *although a minor* at the time of settlement, should be entitled to a settlement-right of six hundred and forty acres, or any amount not exceeding one mile square.

The same act extended the time for filing claims until the 1st of January, 1807; and for the convenience of claimants remote from the Land Office, the Recorders were authorized to appoint deputies for each county, who should receive and record all claims in the same manner as the Recorder himself might do. (20)

A. D. 1807. The following year an act of Congress made provision for the relief of another numerous class of claimants, by the passage of a law entitled "An act respecting claims to land in the Territories of Orleans and Louisiana," approved March 7th, 1807. (21)

The *first* section of this act repeals so much of the former act as requires the original claimants of a grant, concession, or order of survey, to have been the head of a family or twenty-one years of age.

The *second* section declares any person, and the legal representatives of any person, who, on the 20th of December, 1803, was, and had been for ten years successively, in possession of any tract of land not exceeding two thousand acres, free from the claim of other persons, shall be confirmed in their titles to the same.

The *fourth* section confers upon the Commissioners "*full powers to decide*, within their respective districts, upon all claims to land derived in conformity with the laws, established usages and customs of the French and Spanish governments," in favor of persons who, on the th of *December*, 1803, were inhabitants of Louisiana; provided the im does not include any lead mine or salt spring.

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(20) Land Laws of United States—edition of 1827: p. 533 to 536.
(21) Land Laws of United States, p. 548.

The time for the presentation of claims was also extended in both rritories, until July 1st, 1808. (22)

The *sixth* section requires the Commissioners to make out and trans-t to the Secretary of the Treasury and to the Surveyor General, a l and complete transcript of their *final decisions made in favor* of imants, each of whom should be furnished with *a certificate*, wing him to be entitled to a patent for the tract of land therein signated.

The *eighth* section required the Commissioners to prepare and re-t to the Secretary of the Treasury a list of all claims which d *not been* confirmed by them; together with their opinion on them erally, and arranged under *three classes*, viz:

1st. Those which, in the opinion of the Board, *ought to be* confirmed der the provisions of the several acts of Congress.

2d. Those which, *although not embraced* in said acts, *ought*, never-eless, *to be confirmed*, in conformity with "the laws, usages and cus-ns of the Spanish government."

3d. Those which are embraced in *neither* of said acts, and *ought t to be* confirmed, conformably to the laws, usages and customs of the anish government.

It may be proper, in this place, to notice some of the general laws, ages and customs of the Spanish government in Louisiana relative the appropriation of the royal domain to private uses.

In this respect the policy of the royal government was kind and neficent, even to liberality; and this policy was extended to every serving immigrant, whether from the mother country or from foreign tions, who were in peace and friendship with the Spanish Crown. fluenced by this benevolent policy, the royal domain was reserved r the encouragement of emigration, agriculture, the arts and manu-ctures. Immigrants, who, in this way could add to the population, alth and resources of a new, fertile, and almost uninhabited pro-nce, were sure to receive liberal grants and concessions of land, at e rate of eight hundred arpents for the head of a family, half as much r his wife, and in proportion to every child or slave capable of labor.

The amount of land granted or conceded to a settler, always preserved relative proportion to the number of persons in his family, or to his ans for conducting an agricultural or manufacturing establishment, ch as mills, factories or public improvements.

The whole policy of the Spanish government in Louisiana and West lorida was in *favor* of small grants and strictly averse to large ones. his policy was rigidly enforced as early as 1770, when Governor Reilly, under a royal order, issued his proclamation making known e will of the King, by a full enumeration of the regulations which ere to be observed in all grants of land in the province. (23)

1. Gratuitous concessions for cultivation and pasturage.
2. In consideration of public services.
3. In consideration of a tax paid the government upon such body of

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(22) Land Laws of *United States, p. 517.*

(23) *American State Papers—Public Lands*—Vol. 4, p. 84.

lands as the individual might desire and purchase at public sale at certain rate per arpent.

Concessions conveyed no complete title; but certain conditions f filled within *three years* after the concession, entitled the holder t patent—*titulo en formo*—from the government.

Applications for *large grants* were always refused, as was the c in the year 1800, when Don Ramon Lopez y Angulo, the Intendan Louisiana, refused a large grant to Henry Peroux, commandant New Madrid, upon his petition, signed also by many individual his district. The Intendant, unwilling to countenance a "specula in the public lands," refused a grant which would be "hurtful to people, who would thereby be compelled to buy of him that w they were free to obtain of him gratuitously;" and he declared th never was the intention of the King "to dispose of the lands in large quantities, and under such circumstances," as was fully down in the regulations published by Morales on the 17th of J 1799.

The Intendant further alleges, that it would be *improper*, "bec it would not be just; that for a *small consideration*, one or more sp lators should make themselves masters of a great extent of land the prejudice of others coming to settle; and who, consequen would find themselves driven to *purchase* those lands, which might otherwise have obtained *free of expense*." (24)

Again, it is declared that, "under the Spanish government the tendant himself could not have made a grant *contrary to law*, would be disregarded."

To obtain a grant, the applicant for lands filed his petitio *requete*, prepared in due form, in the office of the Commandant o District in which the land is situated. The *requete* sets forth extent, situation and boundaries of the tract desired, and the pur to which it is to be appropriated. together with conditions of forfei the extent of improvement or culture promised within three years, The Commandant, approving the object and extent of the petition seeing no reason why the concession should not be made, procure certificate of the Surveyor General, showing that the land is va and conflicted with that of no other person, with a recommendati the petitioner to the consideration and bounty of the Governor-eral, as one well calculated to advance the interests of the prov The Governor-General and the Intendant entered upon the pet their assent to the concession, with an order of survey to the Sur General, who caused a survey and plat of the same to be made attached thereto. This completed the "*concession*," which serv a title, *not transferable*, until the expiration of *three years;* at expiration of which period, the holder or claimant, by add evidence that he has complied with all the conditions obligato him, is entitled to receive from the government the *titulo en form* patent. This completes the grant, and vests a title in the gra Such was the general tenor of procedure in the appropriation o King's domain to actual settlers.

Meantime the Boards of Commissioners, having been closel gaged in the duties of their office for more than three years, began to complete their reports of confirmations under the provisions of the several acts already recited.

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(24) *American State Papers—Public Lands—Vol. 4, p. 85.*

The first monthly report was from the Board at St. Louis, dated December 1808, and comprising *one hundred and ten* confirmations, for which certificates had been issued to the proper claimants. Similar monthly reports were made consecutively until the 20th of January, 1812, when the aggregate number of confirmations, upon which certificates had been issued, was *thirteen hundred and forty-two:* pertaining chiefly to the districts of St. Louis, St. Charles, St. Genevieve, New Madrid and Cape Girardeau. (25)

Besides claims confirmed, this Board transmitted by the hands of the Recorder, C. B. Penrose, a complete report for the General Land Office, containing an elaborate schedule, comprising no less than *two thousand unconfirmed* and *rejected* claims, arranged into forty-nine classes. Among these were a large number of claims, which, in the opinion of the Board, *ought not to be confirmed*, on account of the *taint of fraud and corruption*, WITH WHICH THEY WERE DEEPLY IMBUED. (26)

The claims which, in the opinion of the Board, *ought to be confirmed*, were arranged under the following classes, viz:

1. Those derived from *bona fide* French or Spanish orders of survey, or concessions, bearing date *on and after the 1st of October*, 1800, A. D., for a quantity *exceeding eight hundred arpents*, but not exceeding one league square; and which had been either inhabited or cultivated prior to December 20th, 1803, in conformity with the terms expressed in said concession, viz: for objects of public utility, such as the erection of mills, bridges, or manufactories.
2. Those derived as above, *not exceeding eight hundred arpents*, for services rendered the government, or for works of public utility, wherein the conditions of the concession have been fulfilled.
3. Those of similar character, and not exceeding eight hundred arpents to persons who have received no other grant, and which have never been declared fraudulent by any former Board.
4. Those that have been either cultivated or inhabited prior to 20th December, 1803, *without permission.*
5. Those for *towns* and *villages*, *common fields* or *commons*, whether recorded or not.

These. and claims pertaining to other classes, were submitted to the consideration of Congress for such legislation as might be deemed expedient.

Under provisions made by law, the Board at St. Louis, through Frederick Bates, Recorder, made its *final report* of confirmations for the Missouri Territory, on the 2d of February, 1816. This report comprised *eight hundred* confirmations under the provisions of an act of Congress approved June 13th, 1812: also, *four hundred and eighty* confirmations and opinions under the provisions of the act of April 12th, 1814: (27) also, confirmations and opinions relative to settlement rights in virtue of the several acts of Congress, from June 13th,

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(25) American State Papers—*Public Lands*—Vol. 2, p. 563 to 602.

(26) Idem—Vol. 2, p. 389 to 562. See schedule in detail.

(27) *Idem*, pp. 609, 611.

1812, until April 12th, 1814, comprising *four hundred and forty-five confirmations*, and four hundred and ninety *rejections*. (28)

The Boards of Commissioners for the Eastern and Western Districts of the Territory of Orleans, had been employed in like manner in their respective duties; the result of their labors were reported soon afterward.

The first monthly report of *claims confirmed* by the Western Board, was dated in December 1811, and comprised twenty-five confirmations, for which certificates had been issued. Consecutive monthly reports from the same Board were made until December 1812, when the whole number of confirmations on which certificates had been issued, was *two thousand one hundred and forty-eight*. Subsequent reports augmented the entire number up to June 1815, to *two thousand two hundred and seventy-eight*. (29) On the 30th of December of the same year, the Western Board again reported *an additional list* of confirmations under the provisions of the several acts of Congress, comprising no less than *twelve hundred and eighty-three claims confirmed*, for which certificates had been issued. Thus, the entire number of claims confirmed by this Board up to the year 1816, when the Commissioners were succeeded in their duties by the Registers and Receivers of the respective Land Offices, was *three thousand five hundred and fifty-eight*. (30)

The Eastern Board in the meantime had been delinquent in making regular and properly arranged reports; yet, the imperfect reports received up to January 1812, as submitted to Congress, indicated the adjudication of *eleven hundred and eighty-five claims which were confirmed*, and for which *certificates* had been issued; besides *two hundred and sixty claims rejected* by the Board. (31) The subsequent reports from this Board were not duly received by the Treasury Department, when the Commissioners were superseded by the Register and Receiver in 1816.

The report of the Register, Samuel H. Harper, made November 20, 1816, contained such an unusual and improbable number of confirmations, that the suspicions of the Department were awakened to the existence of an extensive scheme of fraud and collusion, which required the interposition of Congress. It became apparent, that many fraudulent claims had been allowed and *confirmed*, not only by the officers at New Orleans, but also by those at Opelousas: that an improper and suspicious indulgence had been extended by the officers of these Land Offices, to the admission of fraudulent claims, which, subsequently, required the interposition of a change of men.

The confirmations of claims suspected of fraud were suspended by the government until proper inquiry should be instituted as to the alleged fraud and collusion. At length, Congress proceeded to ratify all the confirmations of the Land Officers at New Orleans, so far as to sanction a *quit-claim*, on the part of the United States, to the lands thus awarded by the offices respectively.

For this purpose, on the 11th of May, 1820, an act of Congress was passed, entitled "An Act supplementary to the several acts for the adjustment of land claims in the State of Louisiana. (32)

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(28) American State Papers—*Public Lands*—Vol. 2, p. 293-5.

(29) Idem—Vol. 2, p. 708 to 735.

(30) Idem—Vol. 3, p. 151 to 220.

(31) Idem—Vol. 2, p. 224 to 367.

The *first* section ratified and confirmed all the land claims within the Eastern District, as described by the Register and Receiver of said District, in their report to the Commissioner of the General Land Office, bearing date November 20th, 1816, and which are therein recommended for confirmation, but *only* as against any claim on the part of the United States.

The *second* section extended the time previously prescribed for filing claims, from July 1st, to December 31st, 1830. (33)

For several years the same system of fraud and collusion continued in the respective offices. The first report, made by the Register at New Orleans, under the provisions of the act of May 11th, 1820, and dated January 1st, 1821, tended strongly to confirm suspicions heretofore awakened, as to an extensive scheme of fraud, which had been put in operation through these Land Offices, and which had resulted in the confirmation of a large number of factitious and fraudulent claims. Nor were these frauds tolerated alone in the Eastern District. The Register of the Western District in a most unaccountable manner neglected to make proper returns to the General Land Office for several years, until in the year 1822, he was superseded in his office by Valentine King, Esq., who was instructed to examine and investigate the claims previously filed with the Register, and to report the same as early as practicable, with his opinion upon them severally, in order that the public surveys might not incur further delays.

On this subject Mr. Graham, Commissioner of the General Land Office, in his report for the use of Congress, dated December 17th, 1824, observes: "It is believed that the reports of the Land Officers at New Orleans, dated November 20th, 1816, and January 6th, 1821, and that of the Register of the Land Office north of Red River, dated January 1st, 1821, include and *recommend for confirmation* many fraudulent claims, and claims *not entitled* to confirmation, although some claims have been confirmed on their reports.—Some of the claims contained in the reports of the Register at New Orleans, I understand have been admitted to be fraudulent," &c. "From information received at this office, there is reason to believe that many similar and *equally unfounded* claims have been filed with the Register at Opelousas, whose report, as required by the act of 1820, has not yet been returned." (34)

Meantime soon after the close of the war, and soon after the appointment of Samuel H. Harper as Register at New Orleans, fraudulent claims began to appear; from which time they continued to multiply upon the files of the different offices, as claims held by numerous assignees, among whom were some prominent inhabitants of Louisiana and the Missouri Territory. Yet none of these secured for themselves a greater notoriety as holders of fraudulent land claims than James Bowie, a man of courage and daring. Many of these claims, in one form or another, were urgently pressed upon the attention of Congress and of the Land Offices acting under the provisions of various laws enacted to meet the diversity of cases.

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(32) American State Papers—*Public Lands*—Vol. 3, p. 506.

(33) See Land Laws of the United States—Edition of 1827: p. 773 to 780.

(34) American State Papers—*Public Lands*—Vol. 4, p. 3 to 6.

For the purpose of disposing of numerous suspicious land claims of this kind, purporting to be derived from the Spanish government, within the Territory of Arkansas, the claimants, by acts of Congress passed May 26th, 1824, and May 22d, 1826, were authorised to institute judicial proceedings in the Federal Court of the Territory, to test the validity of the claims. But such was the influence and assurance with which the claims were subsequently urged through the Court, that the origin and genuineness of the documents by which they were sustained, were not permitted to be investigated or questioned; and, as a matter of course, the claims were confirmed by the Court upon factitious documents and fraudulent testimony.

Yet these claims, confirmed as well as unconfirmed, were, by hundreds, placed in the hands of agents both in Natchez and other parts of Mississippi, in order to be sold or hypothecated as valuable land script, upon which large sums of money were procured to advance other schemes of speculation. Nor was there wanting in the city of Natchez, from 1821 to 1830, men who claimed a residence there, deeply interested in the purchase and sale of these spurious claims, if they were not concerned in the aiding and abetting of those who fabricated them. Men of deep thought and great legal attainments were suspected of being jointly interested in the sale and confirmation of the same by the constituted authorities.

These spurious documents, as prepared, gave factitious evidences of age and use far more ancient than the date and manufacture of the paper upon which they were written; and many of those, finally confirmed, covered lands and secured titles to some of the finest estates in the former parishes of Opelousas and Attakapas; and certain it is that there are now residing in Natchez and its vicinity, wealthy proprietors of splendid sugar estates upon the Teche, Terrebono and Caillou bayous, secured by means of these claims.

Such is a faint outline of a numerous class of claims which are known by the general appellation of *Bowie claims*, and whose intrinsic merits are known to but few.

To remedy this evil, the President of the United States in December 1829, communicated to Congress a report from the Commissione of the General Land Office relative to the extensive frauds practised in the Federal Court of the Arkansas Territory. To investigate th same, Col. Isaac T. Preston, Register at New Orleans, "a man possessing in an eminent degree the qualifications necessary for such a investigation," had been sent to Little Rock for the purpose of examining the original documents or Spanish title-papers upon which a larg number of claims had been confirmed to the holders. By comparing these documents with those from New Orleans, "which were *known t be genuine*," Col. Preston ascertained beyond a doubt, that extensiv frauds had been successfully practised in this case.

"The result of his investigations showed that *one hundred and seventeen claims* covering 60,000 acres of land, had been confirmed by *the Court* between the 19th and 24th of December 1827; and tha seven claims covering 20,000 acres, were still pending: also, that *one hundred and eighty-eight claims* had been withdrawn and struck from the files of the docket, because the holders had not given security for the costs:" and the Commissioner declares there exists *no doubt* but that the whole of those claims are founded on *forged evidences of title.* "It further appeared that under an order of Court made on the 9th of October, 1828, the *original papers*, on which these claims were founded, had been withdrawn from the files of the Court, with the exception of those in *fifty-eight cases.* (35)

The Commissioner further states, that application had been made to the General Land Office for *patents* on the entries made at Little Rock and Batesville, for *eighty-four* of the claims confirmed by the Court. "For the first six cases of entries made at Batesville, patents were issued; but as the number of applications for patents increased, and as the patents were required to be issued to *assignees*, and as a comparison of the assignments with each other made it evident that they had all *been manufactured* by the same individuals," the Commissioner determined to withhold the "patents for the remainder of the claims, fully satisfied that gross frauds had been committed upon the Court." "Two of the claims for which patents were issued, were unquestionably founded on fraudulent evidences of title," and to prevent further entries of the same kind, the Registers at Little Rock and Batesville were instructed to *permit no further entries*, under the decisions of the Court, until the pleasure of Congress should have been ascertained on the subject; and in the meantime measures were instituted to procure a revision and reversal of the decisions. (36)

The claims above referred to were known as the "Bowie Claims," and comprised "upwards of 60,000 acres of floating rights to location upon the best unappropriated lands in the Territory, in any quantity over 80 acres, it having been proven and decreed that the lands, in every case, conceded by the Spanish government had been appropriated by the United States." (37)

The number of *Bowie claims* filed in the Court was no less than *one hundred and seventeen*, which had been confirmed. This whole number was filed in November 1827, and in less than one month were all confirmed by Judges Trimble and Johnson, in the absence of one of the members, notwithstanding the application made by the Attorney of the United States "for *time* to investigate the claims, and to procure testimony for *resisting* the claims successfully." The testimony upon which all these claims were adjudicated, was solely that of John Heberard, David Devore and Samuel Masters, substantially the same *in one hundred and twenty-four cases.* (38)

The orders of survey upon which these claims were allowed, purported to have been signed by Governors Miro and Gayoso, whose signatures in every instance had been *counterfeited*, and but imperfectly imitated.

The signature of Gayoso was an evident counterfeit and but poorly executed, for he always signed his name in a smooth, flowing hand, *in extenso*, "Manuel Gayoso, de Lemos." That of Miro, who generally signed his name Estevan Miro, was counterfeited solely by the use of the four letters, "Miro," in a miserable hand.

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(35) See American State Papers—*Public Lands*—Vol. 5, p. 336 to 338.
(36) Idem—Vol. 5, p. 336.
(37) Idem, p. 380.
(38) *Idem—Vol. 5, p. 338.*

A close examination of these documents convinced Colonel Preston that they all were written by two, and not exceeding four hands; two in drafting and two in signing; and although the *requetes* purported to be the *petitions* of one hundred and twenty-four persons, written and signed by themselves at various times *during fifteen years*, they all appear to have written *good hands*, and to have signed their names *well*, although, according to the witness Heberard, they were generally hunters and trappers in Upper Louisiana, where, it is notorious, that *before the change of government*, few or none of the people about the "Posts" of Arkansas and Washita, excepting the public officers, could write their names.

"The *requetes* evince but little care or effort in the writer to imitate the Spanish idiom or character of writing, although purporting to have been written by so many Spaniards—the character of the writing being evidently American."

Among the evidences that these *requetes* were the productions of only one or two persons, Col. Preston adduces the uniformity in the erroneous orthography which pervades the whole; such as *tiera* for tierra, *ordiniaria* for ordinaria, *profondidad* for prof*u*ndidad, cartose for catorce, do*s*e for doce, tre*s*e for trece, die*s* for diez, mar*s*o for marzo, estableser for establecer, *c*iendo for siendo, &c. One of these hands invariably writes the Surveyor General's name Lave*ieu* Trud*ieu*, instead of Laveau Trudeau, and Or*lians* for Orleans.

Whereas Col. Preston declares that he has never seen *a genuine order* of a Spanish Governor that contained an erroneons *word or letter*—for all such errors, if any existed, were corrected by the clerk before signing.

The appearance of such numbers of fraudulent claims, requiring location *before* the public surveys could proceed, greatly impeded the regular surveys of the public lands within the State of Louisiana. To such an alarming extent had these forged evidences of title been filed in the several offices, that the Surveyor General was instructed to receive for record *no private claim* or survey "which included lands claimed by virtue of written evidence of title, emanating from the Spanish government, and confirmed by Congress, where there *was good reason* to believe that *such written evidence of title had been forged*; and in the meantime to proceed with the public surveys *regardless of any such alleged claim*. (39)

It would extend the limits of this article beyond our design, to attempt a detail of all the subsequent legislation of Congress, until the final disposition of all the claims which were reported to that body for their action. Suffice to say, that after the Boards of Commissioners had retired from the duties assigned them, Congress was the last resort where claimants continued to urge their claims for allowance for more than twenty years longer, in no wise deterred by the groundless character of their titles, or the preposterous nature of their claims.

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(39) See American State Papers—*Public Lands*—Vol. 5, p 336.

The whole system of factitious and fraudulent concessions and suppositious grants which thronged the records of the Boards of Commissioners and embarrassed their deliberations for more than ten years, seems to have had its origin in an expression which appears to have been unnecessarily, and in all probability, without any such design on the part of the Spanish King, inserted in the order of delivery, dated October 15, 1802. This order issued to the Intendant of Louisiana, instructed him to deliver the province to Gen. Victor, or any other officer duly authorized to receive the same. (40) In the order the King expresses his hope that the inhabitants of Louisiana will "continue, and be protected in the peaceful possession of their *property;* and *that all* grants, of whatever denomination, made by his Governors, may be confirmed, *although not confirmed by himself.*" The Intendant in his proclamation issued from New Orleans, May 18th, 1803, announcing the orders of his Majesty, took special care not to omit this benevolent expectation of his sovereign, by reiterating the whole tenor of the order. Hence, on this subject, he informs the people "that his Catholic Majesty hopes that the inhabitants shall be maintained and protected in the peaceful possession of their property; and that *all grants* and property of whatever description, derived from his *Governors*, in the provinces, shall be confirmed, *although not confirmed by himself.*" (41)

This suggested the plan of grants, *ad libitum*, and without regard to any sanction of the King or his authorized representative, the Intendant, either as to the extent or nature of the claims.

After the *annexation* of the Florida parishes to the State of Louisiana in 1812, the land claims in this district were submitted to the same kind of adjudication which had been adopted for the Natchez district and the Illinois country. The first provision made by Congress for this purpose was, the act approved April 25th, 1812, entitled "An Act for ascertaining the titles and claims to lands in that part of Louisiana, which lies east of the Mississippi river, and the island of New Orleans." (42)

The *first* section provided for the organization of two Land Districts in that part of West Florida south of lat. 31°, and between the Perdido and Mississippi rivers. The first district comprised all that portion west of Pearl river; the second, all that portion east of that river. In each of these districts was appointed a "Recorder of Land Titles" and one Commissioner of Claims. The Recorder was to receive and record the titles and claims to lands in their respective districts: after which, the Commissioner and the Recorder jointly were authorized and required to examine and adjudicate all land claims in virtue of any *complete* French, British or Spanish grant, or *other evidence* of claim.

The *eighth* section authorized and required the Commissioner of each district "to collect and report to Congress at their next session, a list of all the actual settlers in their several districts, who have *no claim* to lands derived from the French, English or Spanish governments, and the time when such settlement was made."

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(40) American State Papers—*Public Lands*—Vol. 5, p. 274, col. 2.
(41) Idem, p. 275, col. 2.
(42) Land *Laws of United States*—compilation of 1827: p. 607

The respective offices having been organized, that for the District west of Pearl river was located at St. Helena, and Charles S. Cosby was appointed *Recorder* of Land Titles, and James O. Cosby, *Commissioner*. This district comprised the parishes of Feliciana, Baton Rouge, St. Helena and St. Tammany.

The office east of Pearl river was located at Mobile, and William Barton was appointed *Recorder* of Land Titles. and William Crawford, *Commissioner*. This district comprised all the former Spanish settlements from the Pearl river eastward to the Perdido.

The general principles which governed in the adjudication of the titles and claims to land in the present case, were such as prevailed in the adjudication of similar claims formerly in the Natchez district, which was equally once a portion of West Florida.

The Report of the Commissioner of the Western District comprised a list of three hundred and twenty-one Spanish, and one hundred and eleven English patents, which were *confirmed*; (43) and, also, a list of claims based upon imperfect titles, such as concessions, orders of survey, or *requetes*, from the French, English and Spanish authorities, comprising *three hundred and seventy-five* claims, which were recommended for confirmation, besides one hundred and eighty-seven which had been *rejected*, and thirty-three which were anomalous.

The report from the Eastern Board comprised a list of twenty-two confirmations in virtue of old English and Spanish grants, besides one hundred and fifty-eight claims in virtue of concessions or orders of survey. The report also contained a list of *one hundred and fifty-two* claims which *ought not* to be confirmed, besides one hundred and fifty-five claims belonging to persons who had lost or mislaid their title papers. (44)

The number of actual settlers in this district who were registered, was one hundred and seventy-four.

In August, 1819, the Boards of Commissioners were superseded by regular Land Offices organized at St. Helena and Mobile, conformably to the provisions of an act of Congress approved March 3d, 1819, and entitled "An Act for adjusting the claims to land, and establishing Land Offices in the districts east of the Island of Orleans."

The *first* section ratified all titles and claims derived from complete Spanish grants, and complete titles emanating from the British authorities in West Florida prior to the year 1783, which had been confirmed by the Commissioners of both these districts.

The *second* section ratified and confirmed, in like manner, the decisions of the Commissioners in favor of claimants under incomplete titles from the Spanish government, such as concessions and orders of survey; also, all settlement rights confirmed by the Commissioners for settlements made prior to December 20th, 1803, and reported to Congress.

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(43) American State Papers—*Public Lands*—Vol. 3, p. 35 to 44.
(44) *Idem, p.* 45 to 62.

The *third* section ratified and confirmed all decisions made by the Commissioners in favor of actual settlers, for 640 acres, in virtue of settlements made prior to the 15th April, 1813.

The *fourth* section granted a *donation* of 640 acres to every actual settler, whose name had been registered and reported by the Commissioners as an occupant and cultivator of land on the 12th day of April, 1814.

The *sixth* and *seventh* sections extended the time prescribed heretofore for the presentation of claims, until the 1st of July, 1820.

The Land Offices, as first organized, were conducted by Charles S. Cosby, *Register*, and Fulwar Skipwith, *Receiver*, at St. Helena for the Western District, and by William Barton, *Register*, and William Barret. *Receiver*, at Mobile, for the Eastern District.

On the 18th of November, 1820, the Register of the Western District reported the number of additional claims presented under the *sixth* and *seventh* sections of the act of March 3d, 1819, as follows, viz:

In virtue of	Spanish orders of survey,	122 claims,
" "	British patents, - - -	57 "
" "	Actual settlement, - - -	160 "

On the 24th of July, 1821, the Register and Receiver made their report to the General Land Office, comprising 224 claims acted on and confirmed by them to actual settlers. (45)

On the 11th of July, the Register and Receiver at Mobile made their report to the General Land Office, comprising 153 settlement claims adjudicated and confirmed by them to actual settlers whose names had been registered prior to March 3d, 1819. (46)

There are still large claims to land which have never received an adjudication satisfactory to those who were the most interested in procuring a confirmation of them through the Commissioners, and, finally, through the Land Offices and Congress. The Maison Rouge and the Bastrop claims and many others, have been resisted by the government; and so far speculators, with their subservients, have been defeated in their expectations and efforts to monopolize the public domain. Among the prominent large claims which have been perseveringly and artfully urged upon the attention of Congress for a series of years, may be enumerated the "Winter claim," the history of which is briefly as follows, viz:

In the year 1789, Elisha Winter, an enterprising merchant of Baltimore, emigrated to Kentucky, where he soon became deeply interested in the trade with New Orleans, under the privilege extended by the Spanish government to Colonel James Wilkinson and his agents. Soon becoming a prominent trader, he established a rope-walk in New Orleans, and enjoyed sundry commercial privileges, and undertook in 1797 to build up an agricultural settlement for the cultivation of wheat, flax, hemp and domestic stock. In this undertaking he failed, and finally abandoned his enterprise, and devoted his time to other employments.

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(45) American State Papers—*Public Lands*—Vol. 3, p. 446–449.
(46) Idem, p. 7 to 35.

At length, in 1807 and 1808, with the aid of Don Carlos Trudeau, the former Surveyor General of the Spanish government and acting Recorder in the city of New Orleans, he began to perceive that a large landed estate in the Missouri Territory was almost within his grasp. The Boards of American Commissioners in Louisiana had been several years engaged in the arduous duties of examining and adjudicating numerous land claims of all kinds, which were accumulating rapidly upon their hands, while land-jobbers and speculators were becoming daily more expert and audacious in the preparation of new land claims for the consideration of the respective Boards.

It was at such a time as this that Trudeau discovered among the musty files of his office, a Spanish grant or concession for a tract of land, supposed to be for one thousand arpents square upon the Mississippi and White river, made by the Baron de Carondelet to Elisha Winter: also, two other grants or concessions for two other tracts, supposed to be for five hundred arpents each, made to William and Gabriel Winter, sons of Elisha Winter; each concession bearing date June 27th, 1797, together with a plat of survey, attached to the concession, and purporting to have been made October 12th, 1798. Thus the claims, admitting the order of survey genuine, called for two thousand arpents, or nearly 1800 acres of land.

But it was reserved to the former Spanish Surveyor General, with his ingenious friends and associates, to convert the claim into one of *one million five hundred thousand* acres, as ingeniously argued by Joshua G. Clarke, Esq., Attorney for the heirs of Elisha Winter.

The concession of the Baron designated the quantity in the grant to Elisha Winter, by the words, "*mil arpanes de tierras quadratos;*" and that to William and Gabriel, by the words, "*arpanes de tierras quinientos quadratos.*" This possibly might have been intended by the Baron to signify a thousand arpents in square form to Elisha Winter, and to William and Gabriel each five hundred arpents in square form.

But to those interested in amplifying the grant, there could be no doubt that the former expression in both instances was designed to signify lineal measure instead of superficial; and that instead of a thousand arpents in the first concession, *one million arpents was intended;* and that instead of five hundred arpents in each of the others, *five hundred thousand arpents* was intended for both concessions.

1. The best evidence that this was the true construction of the grant, was the certificate of Henry Cassady, *Deputy Surveyor*, who, on the 10th of November, 1805, certified that the plat of survey attached, designating Elisha Winter's claim as one million of arpents, was made by him on the 12th of October, 1798, and that he, in 1802, had re-surveyed the same *in part*. (47)

2. To corroborate the certificate of Cassady, the Surveyor, *Don Carlos de Villemont*, Commandant at the Post of Arkansas, that in the year 1798, as Commandant on the Arkansas, "he put the said Elisha Winter in possession of said land, comprising *one million ar-*

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(47) American State Papers—*Public Lands*—Vol. 3, p. 257.

pents (*! !*) by order of the Baron de Carondelet:" also, that in like manner, "he put Gabriel Winter in possession of two hundred and fifty thousand arpents of land; that the said tracts were designated by marking two trees for William and Gabriel, while the said Elisha marked his tract by a large stone which he brought from Kentucky;" that each claimant marked for *himself*, as there was no public Surveyor in the District! Said Villemont, the Commandant, being personally present and superintending the same." (48)

The said Commandant, *on oath*, fully believes that if either of the said Winter's, before the cession of the country, had presented himself in New Orleans and demanded a completion of the grant, *a titulo en formo* would have been issued and accorded to them to the full amount of the claim.

The veritable Commandant took great interest in the confirmation of this claim, out of pure *justice* to the claimant, whose father, Elisha Winter, as he alleges, was a great favorite with the Spanish authorities.

3. *Don Andres Lopez de Armesto*, Commissary of War, &c., and Honorary Secretary to his Catholic Majesty in Louisiana, swears that among the files of his office is the original document containing the grant of the Baron Carondelet, bearing date June 27th, 1797.

4. The *Marquis de Caso Calvo*, Brigadier of the Royal Armies, &c., &c., certifies that Don Andres was Secretary to the King's government in the province of Louisiana, and that entire faith and credit are due to him. This certificate is dated New Orleans, April 19th, 1805.

5. *Godfrey Jones*, Deputy Surveyor, certifies, February 28th, 1805, that the *plat of survey* for 250,000 arpents made for William Winter, agreeably to the Baron's grant of 1797, is correct, it having been surveyed by him for said Winter. Said tract extended from the Big Prairie on the Mississippi westward to White river.

6. *Henry Cassady*, Deputy Surveyor, certifies that pursuant to an order of survey from Don Carlos Trudeau, Surveyor General of Louisiana, bearing date 24th of July, 1802, he did on the 24th of November, 1802, carefully survey for Gabriel Winter his grant on the waters of White river, and extending eastward to the Mississippi, near the mouth of the St. Francis, conformably to the Baron's grant of 1797.

7. *Major James B. Many*, who received possession of the Post of Arkansas in the spring of 1804, testifies that Elisha Winter and family were then carrying on a farm in that district, upon the lands of his grant: that he, said Many, saw the corner stone and marked trees designating said land. (49)

8. Seven creole French men and women, former residents in Arkansas, swear that the Winter family resided on, and cultivated said lands in the year 1804.

9. *Don Luis de Onis Gonzales y Vara*, &c., &c., Envoy Extraordinary and Minister Plenipotentiary near the government of the United States, on the 6th of February, 1816, in his certificate asserted that the "Captain-General, or Governor-General of His Catholic Ma-

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(48) American State Papers—*Public Lands*—Vol. 3, p. 258.
(49) Idem, p. 259.

jesty's American Provinces, is vested with full powers to make grants of *uncultivated* lands, in the respective provinces, to such individuals as may desire to cultivate the same and settle upon them." He also further asserted, *regardless of truth*, "*nor do I know* that the Governors are restricted to any definite *or limited quantity:*" also, that "the Baron de Carondelet certainly *had the right* to make a grant for the amount of a thousand arpents square: *mil arpanes de tierras quadratos*, as stated in the grant to Elisha Winter." Yet he does not assert that the grant of *a million of arpents* would have been *a legal grant*, which the King would have been in duty bound to approve and confirm, or, that the phrase in the grant should have been *rendered one million of arpents* in English. (50)

10. *M. Lafou*, not behind his colleagues in zeal for the establishment of this claim, testified on the 29th of June, 1816, that he had been a Surveyor and Engineer in Louisiana for *twenty-three* years, and that he was well acquainted with the French and Spanish languages, and with the customs of the Spanish government, and that the terms "*mil arpanes quadratos*" in the grant made to Winter in 1797, in English signifies "*one thousand arpents square of land:* and that the terms "*quienintos quadratos*," as expressed in the same grant, in English means *five hundred arpents square.*

He further testifies, "that it is a well known fact, that *arpent* in the Province of Louisiana was used to express *linear measure:*" also, "that the large grant made to E. Winter is a *square figure*, with one thousand arpents on each side, or the square of one thousand arpents; that the tract granted to William and Gabriel Winter are each *square figures*, having *five hundred arpents on each side.*" He further testifies, falsely, that wild lands in the Province were deemed by the Spanish authorities of but little value, and that they were very freely granted to applicants; hence the extent of the grant of the Baron to his particular friend, Elisha Winter.

11. William Garrard, former Commissioner, and subsequently Receiver in the Land Office at Opelousas, testifies on the 18th of April, 1816, "that *arpent* was understood by the creole French as *linear measure*, just as *league* is in the admeasurement of land; and that he has often heard the French designate *distance* by arpents in their horse-races."

12. *Joseph Walker*, on the 10th of September, 1816, certifies, that he is a native of Louisiana, and was raised under the Spanish government; that he knew Elisha Winter as early as 1792, and that being a great favorite with the Spanish government he could have obtained *as large a grant* as any other man. He also certifies, that "*mil arpanes de tierras quadratos*" in the grant of said Winter, is intended to signify *linear measure*, and it is *equivalent* to these words, i. e. "*ten thousand poles square.*"

13. *Don Jose Vidal*, who had been Commandant at the Post of Concord, and who had been peculiarly liberal in granting *requetes* to American citizens within the district of Concord, on the 15th of October, 1816, certifies that he has been an officer of the Spanish govern-

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(50) *American State Papers—Public Lands*—Vol. 3, pp. 359, 360.

r twenty-five years; and that he well remembers Elisha Winter
Orleans and on the Arkansas; and that *arpent* in French is
nt to *ten French poles* in length.

ayfield Ludlow certifies to the same fact, i. e. that the French
term arpent as linear measure.

homas Freeman, Surveyor General, of the United States,
Tennessee, certifies on the 20th of July, 1817, that *arpent* is
icial measure, but that the *improper* use of it as a measure of
s universal among the Spanish Surveyors; and that the term
is as universally used by the people of Louisiana to express
, as the term *mile* is by the people of the United States.—[See
n State Papers—*Public Lands*—Vol. 3.].

is the doubt and uncertainty which may be thrown around a
aving a semblance of truth for the foundation, upon which may
d a structure, gorgeous indeed. The Winter claim, although
d by the influence and intrigue of the many individuals of
and standing in the Mississippi Territory, who had become
interested in its confirmation, at length fell to the ground,
in its fall, the hopes of the credulous, and the money of the
s. Congress persisted in rejecting the claim as unfounded
dulent; and those who took an interest in sustaining the pre-
of the claim, as their only recompense, shared the loss and the
intment.

Art. II.—THE SCIENCE OF HISTORY.

ion to the History of Philosophy, by Victor Cousin, Professor of Phi-
y, of the Faculty of Literature of Paris. Translated from the French
ry Gotfried Linberg. Boston: Hilliard, Gray, Littel & Wilkins. 1832.

gh this theory had its origin in England, in the manner des-
yet it was not there that its developement was confined. At
early period of its existence, it passed over into France, and
its abode among a people much better qualified to bring to
l its hidden powers than their insular neighbors. In France it
t taken in hand by Condillac, who lost no time in putting it
all its paces, and in drawing from it all the consequences
enclosed. Partial, bounded, and exclusive as was the system
by Locke, it was not yet enough so for the Frenchman; half-
asures would not suffice for him; he was displeased with its
ity; it lacked simplicity and unity; it was not sufficiently ex-
reflection had no business there; nay, reflection itself was
but a species of sensation; hence he suppressed entirely the
icant part which Locke had left to reflection, and reduced the
to the single proposition, that sensation was the sole element
n the sole instrument of knowledge. In short, Condillac made
n the sole administrator of affairs; he subjected every thing,
n, comparison, reasoning, all, to its omnipotent power; he made
ll of intelligence, and even the all of will; the all of conscious-

ness, the whole soul entirely: according to him, the soul was nothing but a collection of sensations, without unity, without substance, and without causative energy. Condillac thus furnished the metaphysics of sensation: its moral system was supplied by Helvetius, which may be summed up in these words, to wit: that it is perfectly right and agreeable to the soundest morality to do whatever affords one pleasure to do, and to avoid doing whatever gives pain. From this principle St. Lambert extracted the most positive applications, and composed from them a veritable code, of which pleasure and voluptuousness constitute the foundation, and of which personal selfishness is the last corollary. Still more: it was necessary that this morality should be politically applied: it was so applied, and the French revolution was the last corollary from this application. It was also applied to all sciences: and medicine, too, had an entirely empirical philosophy. Such indeed was the mania that seized upon the French people on this subject, that it resembled more a national saturnalia than a calm philosophical disquisition: it thence crossed the Rhine, and found an echo even in Germany, little congenial as is the spirit of that nation to such a philosophy. In that country, however, it was comparatively faint and pallid, and accordingly subjugated only ordinary minds. Its greatest representative there, was Tiedemann, who composed a history of philosophy conformable to the point of view of sensation; but its virulence was so much softened in passing through German erudition, that the system was brought back pretty much to the condition where Locke had left it.

It is not to be supposed that a system like this will entirely expatriate itself, will abandon altogether the country of its birth, without leaving behind some monuments of its existence there. And here we beg leave to correct an error of omission committed by our author. In his history of the philosophy of sensation, which in all other respects is perfectly minute and accurate, Cousin entirely suppresses the important part enacted by Hume in this episode to the great drama of Universal Philosophy. It is this omission which we now purpose to supply. In connection with this circumstance there is also a "sin of *commission*" of which our author has been guilty, and which comes the more ungracefully from one who has enthroned himself upon the serene heights of an almost supermundane philosophy; who sits the eminence like an arbiter of fate, uttering oracles of the world's destinies; who affects to look down with supreme indifference upon all that is passing below; who professes to be the philosopher, not of a nation, but of humanity; and who assumes to judge without passion, and to decide without prejudice. We allude to the injustice Cousin has done the English nation by assigning it a part subordinate to France and other continental nations, not only in the domain of philosophy, but also in the great work of civilization in general. As our own national importance is somewhat compromised, by implication, in this matter, we would willingly take up the cudgels against such an arrogant assumption of superiority; but happily we are forestalled in our championship and gladly yield the arena. The translator, in a note appended to the work, has rebuked in a becoming manner this *etty trait of* national vanity as well as of national prejudice, and has amply vindicated not only the English nation, but the Anglo-Saxon race wherever found, setting forth in their proper light the great services rendered by the Anglo-Americans to the cause of civilization. We are, therefore, luckily spared any further digression on this point, and will now pass on to the consideration of our subject.

While Condillac, in France, was pushing on Locke's philosophy of sensation to its last extravagances, in England, the true and necessary result of such a philosophy was the stupendous fabric of skepticism, erected by Hume, a kind of huge battering-ram that shook for a time the minds of all Europe, and the traces of whose wrecks are not entirely obliterated to this day. The mind of Hume was eminently philosophical and in the highest degree logical; he possessed, besides, a dignity, gravity, and an elevation of sentiment and thought, to which his more volatile and flexible co-laborers on the other side the Channel were utter strangers. It was doubtless this fact, and the air of greater seriousness and of comparative moderation that pervades his philosophy, which gave it so extensive a currency and so durable an influence. While sensualism, in the hands of Condillac, Helvetius, and St. Lambert, revolted the common sense of mankind and found its refutation in its own extremities, the system of Hume, formed of the same material, stood like a solid rock frowning over the waves that dashed and broke themselves at its base. Indeed, the premises of Locke being assumed or proved to be true, all the inferences which Hume drew from them were strictly logical and irrefutable. It was not in the falseness of his logic, therefore, that lay Hume's error, but in the insufficiency of the premises from which he reasoned. This was felt and understood to be the case. The frightful results of Hume's rigid logic and unerring deductions, may, therefore, be considered to have been the immediate cause of the "honorable protestation" entered by the Edinburgh professor, in the name of humanity, against the extreme consequences of sensualism. Hence originated the school of spiritualism; for Hume's inferences could only be refuted, and the appalling skepticism they had engendered could only be arrested by introducing into the arena of disputation another element of human reason, for acquiring ideas. And in fact, it is the same with philosophy as with all other departments of human affairs; when a party has taken ground on one side of a subject, there necessarily arises another party which takes the opposite side; for, as Sir Roger de Coverly has been made to observe—"on most questions much can be said on both sides;" and indeed this seems to be a regulation as wise as it is universal; for it is only by this means that complete developments are obtained, while at the same time a wider field is thereby given to human liberty or volition, consistent with another law of creation, to wit: the law of variety or multiplicity—a multiplicity emerging from a prolific unity without destroying the latter, and again returning to the embraces of unity without losing its individual identity therein. As we have already seen, sensualism and spiritualism originally coexisted in Cartesianism, or rather in consciousness as revealed by the method of Descartes. But they existed there as embryos, *in potentia*, as it were, mere germs. Fertilized by the method of Descartes, they emerged seperately from the bosom of consciousness, grew up separately in order to give the world the full benefit of their respective capabilities; and we will presently see how, after having achieved their fortunes by pursuing independent and hostile courses, they subsequently fall into each other's embraces, and from their union spring offsprings that are destined to run similar careers.

Logic may be defined thus:—the science that explains the laws by which the human mind is governed in acquiring knowledge; or it may be described to be—the science that prescribes rules for the direction of our faculties in the acquisition of knowledge. We know not for certain whether either of these definitions be orthodox, as we have before us no class book or work of any description on this subject. Such, however, according to our conception, is the aim and intent of this branch of philosophy. Two important epochs mark very distinctly the rise and progress of this useful science, which may now be considered as very nearly perfect. One of these epochs belongs to Greece, and the other to England. Two eminent individuals were mainly, if not solely, instrumental in determining these two epochs. The first was created by Aristotle, the latter was the work of Bacon. Whatever may have been the design of Aristotle in composing his famous "*Organum*," it is certain that one great result, and perhaps only one, has flowed from it. He has therein perfected the method of reasoning by "*deduction*," that is, of drawing from the premises whatever legitimate consequences may be actually included in them; this is the triumph of the syllogism, trivial, ridiculous, and obscure as many of the forms of that famous art may seem. On the other hand, the only end accomplished by Bacon, in his "*Novum Organum*," was simply the method of reasoning by "*induction*," that is, of proceeding from particular facts, communicated by observation, to a general principle within which they are included. Deduction and induction, these are the two modes of procedure which belong to reasoning. The discovery of those two methods is all that can properly be attributed to those two famous logicians who were their respective authors. These two methods were found at the terminii of their long and herculean labors, and nothing else of importance was found there. Though these results may seem insignificant when compared with the expenditure of mind with which they were produced, with the eclat which attended them, and with the vast parade that has been made about them; yet these results are in reality as great as they are apparently simple; for to them is in some degree due all that now exists in philosophy, science, and mechanics. It is true that Aristotle's logic has for a long time past been relegated to schools and colleges, and for aught we know has more recently been banished even thence; yet it is no less true that its sway over the human mind was supreme for near two thousand years; during which time nothing but his method of reasoning was known among philosophers, or was allowed to be known. Such, indeed, was the intolerance of the despotism which his Organum exercised over the European mind during this long period of time, that history furnishes no parallel to it, if we except religion as wielded by the church of Rome. Luther's reformation broke the power of the latter, while Bacon's Novum Organum, without destroying, shared empire with the former.

It was Aristotle's method of *deduction* which Hume employed, and with which he drew from Locke's apparently just and innocent premises consequences so frightful that they threw into wildest commotion all the thinking minds of his day. Appalled by these consequences, the Scotish philosophers, Reid and Stewart, were induced to attempt a rigorous application of the *inductive* method of Bacon to the science of mind. Discarding hypothesis, they adopted *psychological* observation as the only true method in intellectual and moral science. By psychology is meant, an analysis of the *internal* organization of human reason. By this process the Edinburgh professors were enabled to discover a class of *intuitive* ideas which never could have been given by *physical* observation alone. These worthy professors, however, did but little for this branch of philosophy. The leading trait of their minds is good sense; but simple good sense must not be confounded with science. Good sense is the basis of science; it is the true point of departure, and it is also the point to which science must return; but something more than mere good sense is required to develope a science to its utmost capabilities. Therefore, all that can be said of the labors of the Scotish philosophers in this department of science is, that they gave to it its first impulse. Passing thence into Germany, that land of earnest meditation, it was there taken in hand by one of the greatest reasoners of any age, one not inferior to Aristotle himself and to whom indeed he has been thought to bear a striking resemblance.

If the German spirit were repugnant to the philosophy of sensation, it was in the highest degree congenial to that of spiritualism. Indeed, the affinity was complete. Hence we find this spiritual people hailing enthusiastically the advent of the new philosophy, and giving themselves up to it with that perfect *abandon* which characterized the French nation in the respect to the opposite principle. It was the illustrious Kant who, in Germany, acted the father confessor, or rather the arch inquisitor to the new philosophy; who tortured from it all the hidden secrets it contained, and then wrought them into a system of skepticism far deeper than that of Hume's, which he had refuted. Not content with demonstrating what Reid had assumed, Kant went very much further. Immersing himself wholly within the profoundest depths of human consciousness, Kant made a complete system of the statistics, and of the interior laws of thought. Having enumerated, described and classified them, he then followed them from out their dark, labyrinthine depths into the light of day; traced them in all their legitimate applications; made them account to him for his own existence, for the existence of the world, for the existence of God, for the existence of all things; and sought and found also the manner of their application to morals, politics, jurisprudence, religion, *et cetera*. Such was the mode of Kant's psychological researches, and such were the uses to which he applied the laws of thought which that method had revealed to him. Fichte was a disciple of Kant; but with greater consistency, he went even beyond his master. He rescinded ontology from philosophy, and aggrandized logic and ontology at the expense of every thing else. He made out the universe to be a mere system of logic, and all concrete existences to be logically demonstrable from data supplied by human thought. He placed God in the centre of every man's soul, and made God the principle of life that is, that this subtle, mysterious, and indefinable principle which we call life is God manifesting himself in every individual man as well as in every other description of individual existence; from which we are to infer that the universe, all orders of creation, are nothing but the modes of God's existence. If we have interpreted this philosopher aright, we profess ourselves unable to discover in what respect his doctrines differ from Spinoza's celebrated system of pantheism. What this pantheistic system is, we will see hereafter. We believe, in point of fact, that all the different schools of philosophy that have existed in France and Germany since the time of Spinoza, have reproduced to some extent (it being merely a question of more or less) the pantheism of that great metaphysical geometrician, who demonstrated metaphysical propositions according to mathematical rules. Nevertheless, the disciples of Fichte have undertaken, by means of his principles, to demonstrate the truth of Christianity, and contend that the existence of Jesus Christ, as a divine personage, is conceivable to human understanding upon no other terms whatsoever. We know not if even Spinoza's pantheism, or any other of the forms under which it has reappeared, be necessarily hostile to Christianity. If the philosophies be true, and if Christianity be true, then of course they are susceptible of being reconciled upon some ground, for truths never contradict each other. All we will undertake to say is that this reconciliation has not yet been made, and that it will require a much deeper and more comprehensive eclecticism than the one produced by Cousin, to effect it. Positive science is of such a nature as to compel belief in spite of any thing the church can do; hence, after first proscribing each one of the physical sciences as it made its appearance, the church ultimately found her account in seeking a friendly compromise. But we are digressing, and becoming altogether irrelevant—let us return.

Here, then, spiritualism was consumated. Beyond this point it could not go. In the system of Fichte, it had reached the height of that sublime extravagance to which it was necessary it should attain in order to meet its ruin, just as sensualism had destroyed itself by arriving at its last consequences, at the very extravagance of baseness, by asserting that the soul is nothing more than a mere collection of sensations, and that God is nothing but a general abstract idea perceived by the senses. Nothing more now remained to be done for spiritualism but to perpetuate its memory; that is, to find for it an historian who, taking it at the moment of its highest action and most perfect developement, should bring it in connection with all other systems of philosophy that had preceded it, and in this honorable association to give to it an historical existence which should never perish. Such an historian could be found only in Germany, the land of profound erudition; and such an historian was Tennemann, who by his vast learning superabundantly fulfilled this necessary condition. Thoroughly imbued with the ideas of Kant, Tennemann composed a history of philosophy from the point of view of spiritualism, reproducing therein the philosophy of Kant. As Tennemann saw only with the eyes of Kant, and thought after his fashion, he of course made his history as partial and as exclusive as was the philosophy itself whose memory he *thereby* consecrated; and this, indeed, was neither to be deplored nor avoided; it was as necessasy and as useful as it was inevitable and unavoidable. And now it becomes necessary to return once more upon the past, in order to make it account to us, not only for the condition in which, at this precise juncture, we find our subject, but also for the step forward which it is about to make in its future career. This short review, too, we hope, will serve another purpose; it will serve to inspire us with a proper respect for the "new science" whose cause we are advocating; for it will reveal to us the fact that it is not an ephemera, a parvenu of a day's growth, which, because it appeared to-day will disappear to-morrow. On the contrary, from the next few paragraphs we will learn that the "Science of History" has already age and standing sufficient to recommend it to our politest attentions; that it is in fact already historical and traces its genealogy through many generations.

The first attempt to write an univerral history, upon scientific principles, developing a plan in the life of humanity, belongs to the seventeenth century, and its author, Bossuet, belonged to France, "the eldest born of the church." The seventeenth century, when this design was put in execution, was precisely the culminating point of the church's supremacy in Europe. So exactly indeed had its meridian then been reached by the church that, as one may say, the very next moment of time shook it from its zenith and gave to it a perceptible declivity on the other side. Just then, however, it seared its brand upon humanity by giving to it an universal history of the race conformable to its own peculiar and exclusive point of view. The church teaches that the world was made for man; that man was made for religion, or for the service of God; that Christianity is the only true religion; and that the church is the only legitimate interpreter of Christianity. A theologian and a high priest of the church, Bossuet could do no otherwise than make Christianity the centre of his system, around which all the other elements of humanity should revolve as sattellites, subordinates, subsidiaries, mere aids to the one great and only end for which man was created—hence the character of Bossuet's *Universal History*. This was the first step of the genius of history, and as such it was necessarily weak and feeble; for Bossuet barely exhibits the faintest outlines of a plan superficially treated in every respect; seeing as he does every where but one element, religion; and but one people, the Jewish nation. Though religion be not the only element of humanity, yet it is the first to exhibit itself in the life of a people; for humanity, like an individual, in its infancy is credulous and much addicted to faith, at that tender age, while reason is yet in abeyance, and destitute of experience, it accepts of revelation and leans upon authority—hence there is a peculiar fitness, an analogical propriety in this beginning of the history of humanity. But as it was the first step, it could not be the last.

The next effort of this kind is due to the eighteenth century, when the State was supreme and acknowledged no authority beyond itself. Next to religion, the church, the ritual of worship, in the development of the human mind, comes the State, government, laws. The latter is but a change, a transfer of authority. It is a substitution of human for divine authority, in which the latter is still retained, though in a subordinate, modified *form*. *It was necessary*, therefore, that the historian of humanity, at this period, should be a jurist—hence Vico, who, in his "*New Science*," or Universal History, according to philosophical principles, considers all things from the political point of view and who, therefore, made religion and all other elements of humanity subordinate to the State. Vico's plan is very simple, and of course very defective; but imperfect as it is, it nevertheless exhibits in the life of humanity, or rather in the life of nations, a well defined plan, in obedience to which the existence of every people is governed. In this respect the system of Vico stands in bold relief by the side of the dim forshadowings of a plan which is barely perceptible in Bossuet's celebrated "Discourse." Vico, therefore, has been not inaptly styled *the Father of the Philosophy of History*. His plan is simply a circle, of which he has determined all the points with precission, like the hours marked upon the dial plate of a clock. This circle is made to serve equally all nations, peoples, and ages; all are made to travel round the same unvarying track, like a blind horse in a mill, or like the index over the face of a clock, until the funeral knell of each in its turn is tolled which consigns it to the grave, when its place is occupied by another who passes through the same phases and then dies as did its predecessors. Vico has marked upon this circle three prominent points or epochs at equal distances from each other. His technical phrases are somewhat unique. With that peculiarity which characterizes his vocabulary of names throughout, he has given to these three epochs the singular prenomens of envelopement, developement, and decay; and these again are considered under two general terms which he calls "*corso*," and "*ricorso;*" that is, the perpetual and necessary returns of these three degrees; that is, every nation, in whatever age of the world's history or in whatever quarter of the globe it exists, no matter for its geographical position, or for its antecedents, or for any other appliances, every nation without distinction must pass through the three epochs of envelopement, developement and decay in precisely the same order, and with no greater or less results attending the rise and fall of one than of another.

The first of these epochs is the religious age, improperly called the age of barbarism. In the earlier stages of humanity, man was necessarily governed by a species of theocracy in the shape of fitichism and polytheism; because, being unacquainted with the laws of nature, every striking phenomenon which in any way influenced his conduct, his comfort, or happiness, was ascribed by him, through that awe and adoration so peculiar to ignorant and uncultivated people, to some divinity. Thus, among all primitive and ignorant people, every mountain and valley, river and fountain, forest and sea had its presiding deity. From fitichism to polytheism is the first stage, and thence to monotheism is the consummation of the religious age which constitutes the epoch of envelopement. During this long period, in which religion rules, the legislators are, so to speak, Gods, that is, priests; it is in every people the age of divinity, and corresponds in the individual with that age which extends from infancy to early manhood.

[TO BE CONTINUED.]

Art. III.—PRODUCTION, ETC., OF SUGAR IN THE UNITED STATES.

1. Of the qualities of various soils, and their adaptation to the production of cane, and of their exposition, North and South side of the river.
2. Of the preparation of the soil for planting, ditching and ploughing,
3. Planting, and cultivating.
4. Of seed cane, time of cutting, and mode of preserving it.
5. Of grinding, and making sugar in open kettles: defecation with lime, purging, cooling, &c.
6. Of the apparatus for making white sugar, its costs and advantages.

The treating of any of the divisions of the above subject with sufficient details to make it useful to the practical farmer, would require the space of a volume. To abridge such disquisitions, and present them in a condensed form, convenient to the general reader, would admit of so little development as to deprive them of their chief usefulness. *A mezzotermine* will be more agreeable to your readers. I will therefore be as brief as the subject and my loqacity will permit. I have thought it proper to group together the whole process, to begin with the preparation of the soil, and finish with the manufacture of the product ready for market, on account of the necessary connection between all the parts, and which will be easily appreciated by those conversant with the matter. The good old proverb "that the old way is the best," must yield, in this instance, to the fact, that vast improvements have been introduced of late years, which those who are the most tenacious to ancient forms and usages, are forced to admit, and in many cases are guilty of putting in practice. It is worthy of remark, that in no occupation are improvements so slowly introduced as in agriculture. And this arises, in part, from the prudence which characterises the class of men engaged in it, who are over-cautious not to risk the well earned price of their labor, in experiments. A great difficulty in the way of improvements, is the want of proper observations, which nobody can make but the planter himself, and which would cost him nothing but the trouble of making them. I would respectfully suggest to the planters to keep a book in which would be noted down daily all that is worthy of record, during a certain period of years. The subjects to which they should direct their observations need not be pointed out, as they will naturally suggest themselves, and should embrace every circumstance and casuality which may result to the benefit or detriment of the planter.

The most prominent, however, are, the weather, the variations in temperature and its effects on the growth of cane, the various sorts of plowing, the late or early planting, the quality of the seed cane, planting deep or shallow, how the cane in various conditions is affected by drought or two much rain, planting the rows wide apart, or crowding the cane nearer, &c., &c. One of the important facts to be ascertained would be whether there is any particular mode of culture by which the cane could be made to ripen early. Experiments could be made in a small way on the farm, with very little or no expense, and without risk until an improvement is well established. I am far from recommending the adoption without examination of every new Utopia. On the contrary I would consider it the height of imprudence to adopt new theories, however plausible they may be, the propriety of which would not have been demonstrated by the most positive experiment in all cases. At the same time these experiments should be made with care and exactness. It is seldom that they can be sufficiently determined in one year. They should be repeated two or three years in succession. The difference in the seasons, and many unforeseen and at first unappreciated circumstances, may modify the results that are obatined. The science of planting appears simple because it is practised by the greater part of the population, and many uneducated and very primitive people, but it is far from being devoid of art, and perhaps no other science requires the knowledge of more facts, and more observations. No better proof is needed of it, than that in different countries and climates the same plant is cultivated in a very different manner. Practical planters may be found, however, illiterate and uneducated, possessed of much knowledge in their particular art, and which it would require much time for a scientifice man to acquire. It often happens that one neighbor adopts from another, something new, the result of observation, of which he would have been deprived without communication. The most knowing will not be so bold as to say that he can learn nothing more. If all the observations made by every one could be collected in a body, it might be possible to deduce from them some good system.

It is with this view, availing myself of the offer of your pages extended to contributors, that I present my own observations with comments. and shall be happy to know that, after having contributed my mite, I shall have elicited inquiry directed in a proper channel to obtain useful information.

I. — *Of the Various Qualities of Soils, and of their Adaptation to the Production of Sugar Cane, and of their Exposition North and South side of the River.*

The principal Sugar region of Louisiana consists in a strip of land on both sides of the Mississippi, from Point Coupee, the most northern part, down to the mouth of the river. The soil is of a uniform quality, being rich alluvial deposit from the waters of the River before the making of the embankments or levees. It is generally of mixed clay and sand, and vegetable mould, but in many places the sand predominates, and it is then called, *light soil*. However, those three characteristics are found combined in various degrees, and not unfrequently very distinctly marked on the same plantation. It is known that in all alluvial soils, the sand being the heaviest body carried by the water is deposited first, and the particles of dissolved clay and vegetable mould being held longer in suspension, are deposited in places more distant from the bank of the stream, when the water is less agitated. When before the embankments the river overflowed its banks, the water flowing from the river met with obtructions causing capricious meanders, wherever a stream was established there was a greater deposit of land, and the land was a little more elevated, making what is called in the country, *coteaux*, or highland. This kind of land never has water lying on it, except in accidental inundations caused by a break in the levee. It is distinguishable by a peculiar growth of trees which do not flourish in the lower lands, such as magnolia, oak, mulberry, &c., &c., with some cypress. The lower lands which are covered more or less with water, during a great portion of the year, are almost exclusively cypress.

The land uniformly has a gentle inclination from the river, giving thereby a great facility for draining. It is all equally well adapted to the growth of the cane. It is pretended by some persons, that the sandy soils produce a better quality of sugar, and the cane ripens earlier upon them. The difference, however, is thought to be very small. They have other advantages, perhaps more important. They are of more early cultivation; not so liable to be rendered compact by a beating rain; requiring less draining, as the water escapes by filteration; and not liable to become too hard for ploughing, in a dry season. The objection to those soils is, that they are not so rich, and that they are sooner exhausted. The stiff, or clay lands, are richer, and with proper preparation are equally friable, unless there be an excess of rain. As they are more retentive of moisture, they are frequently too wet and soft to plow, during several days after a shower. They also require more ditching, as the draining must be made by the surface, when on the contrary, the sandy soils drain very quick by filteration after the excess of water has run off.

There is considerable difference in the climate between the upper portion of the sugar region, and the lower, or parts nearer the sea and lakes. Upon an average the difference of time in the appearance of the first white frost in the fall between Point Coupee and New Orleans is about ten days. And for places near the sea and lakes, the difference is perhaps greater. It is a general saying among the planters on the Mississippi that there is a difference between the north and south side of the river, the cane on the north side freezing earlier. There are particular situations on points, on the same side, where the cane is affected later than in others. In the Parish of St. Charles on the right bank of the river the cane was not sufficiently affected by the frost in 1846, to be hurt, as late as the 25th of December, whilst it had been completely frozen three weeks, not more than 20 miles higher up on the same side. The plantations in that parish on the right bank are nearly surrounded by water, having the river in front, and in the rear extensive marsh prairies and lakes. It is supposed that the vapors arising from the Mississippi, carried over the fields by the north wind afford some protection to the cane. How the vapors rising from the marshes which are in an opposite direction, affect the cane, must be accounted for in another way. Perhaps it is by intercepting the rays of the rising sun until the frost is melted, thereby avoiding the sudden change which would take place were the sun to strike the plant while it is yet frozen. It is a remark that has been made in gardening, that plants are measurably protected from the cold by sheltering them from the rays of the morning sun. All the planters agree in the remark that the cane freezes most and is earlier affected by the frosts, in the parts of the field that are nearest to the woods. The hypothesis that it *is the mist rising from* the river which affords the *protection appears plausible. It* would be curious to ascertain the true cause, but the most important to the present inquiry, is, that the fact is established by universal observation.

It is maintained by some planters that the best exposition for the rows of cane when they are wide apart, would be north and south, as they would then receive the rays of the morning and evening sun in full; whereas, if the rows were laid off east and west, a portion of the cane would necessarily be shaded by those intervening with the ray of the sun. However it may be, it is not always possible to lay off the rows in any given direction, because it is necessary to follow the inclination of the land to admit of draining by the open furrow between the rows. But in this as in many other matters, no accurate observation has, to my knowledge, been made.

The soil of the land of the Mississippi may be said to be inexhaustible. It is all alluvion, consisting of a mixture of clay, sand and vegetable mould to a considerable depth, and as has been said by an intelligent planter who has written on the subject, the only thing necessary to renovate it, is to plow a little deeper, and turn up fresh soil. In Holland, where land is more valuable than it is here, it is renovated after producing grain crops, which are the most exhausting to the soil, by digging deep ditches side and side, and filling the first with the dirt taken from the second, and so on successively, until the whole field had been gone over. The difference between this and deep plowing, is from the greater to the less; it is the same thing, to wit: turning up new soil.

The ground should be well broken up before planting, and as the cane is generally left to rattoon for two years, it is only the third year that the breaking up or plowing in full can be repeated. Let every successive plowing be a few inches deeper, until the soil is exhausted to as great a depth as the plow can reach conveniently, then some other plan must be resorted to. But by the above process, taking care to make a rotation of crops on the soil, it is believed that it would remain good at least during a man's life time. There are other ways of renovating exhausted soils, very successfully put in practice. When the cane is cut for the mill, the tops are thrown into the middle furrow, and during some leisure time, covered up by running a furrow on each side. The sooner it is done the better, so as to bury the tops while they are yet green, thus returning to the earth, not only a portion of what has been taken away from it, by the roots of the plant, but also what the plant has drawn from the atmosphere by its leaves. Some planters who have done this, affirm that the lands are enriched instead of being impoverished, notwithstanding a continuous cultivation of cane only. The fertility is restored also to exhausted soil, by suspending the culture of cane for one year and sowing a heavy crop of peas on it in the month of May or June. They grow very luxuriently, and make a matted bed of vines and leaves from one to two feet in thickness, with a plentiful crop of peas if planted in good time. The ground being shaded thereby during the hottest months of the year, the action of the heat of the sun is diminished, and there is less evaporation of the vegetable substances in a state of decomposition falling on the ground. The moisture thus retained on the earth is favorable to the decomposition of those substances. The pea vines bear

ore extended foilage in comparison with the dimensions of
s than any other plant, hence their capability of extracting
tances from the atmosphere, particularly carbonic acid gas
es, and phosphates by the fruit. In proof of such hypothe-
ample may be given of a small yellow vine very common in
y, which derives its nourishment entirely from the atmos-
will thrive being suspended in the air by a thread, blooms
seed, and when dry, leaves solid ligneous matter. In truth
e quailities in common with most, if not all kinds of mosses.
tly wherever they grow they yield to the earth substances
n vegetable mould, without having taken anything from it,
ore add to the fertility of the soil. The experiments of
ave shown the reason why grain crops exhaust the soil so
hat more is taken away from the earth than is returned to it,
ularly the phosphates, or bone earth. The dried stalk of the
s husk contain nine tenths of silica, and grain will yield
hs of phosphates. If exhausted soils are merely suffered to
few years their fertility will be restored, particularly if cattle
upon them to graze. Lands that are renovated in any of
modes will re-produce cane very finely.
ar planter could easily procure large quantities of very good
rom the Bagasse coming from the mill, and the large quan-
tle that are indispensable to a farm. Not much attention,
has been paid to it so far, as the planters prefer clearing the
which they take their wood. The fresh lands thus obtained
duce well until they have been drained for some time, and
iously cultivated in corn for one or two years. The cane
y luxuriently upon them but does not ripen early enough.

the Preparation of the Ground for Planting, Ditching and Plowing

al mode of draining is to make ditches running perpendic-
n the river to the lowlands, at the distance of one or two
part, and from two to four feet in depth, with cross ditches
ne dimensions at a distance of four or five arpents, the dirt
ast being thrown on the lower side to make a road, with
ver those that are intersected by it. Besides these, it is
ake cross ditches of about one foot in depth and breadth,
ce of about one hundred feet apart, which do not interfere
plowing, as the plow passes over them. Such ditching is
icient in the light or sandy soils where a great part of the
accomplished by filtration. But I apprehend that in the
something more is necessary. I have frequently remarked
plantations the squares formed by the principal ditches,
efective plowing, become hollow, when the reverse ought to
the case. The land should be plowed for the purpose of
by following up and down its inclination. When the plow-
on a piece of land to plow it, he begins by laying off a
venient size, say twenty or thirty feet in width, leaving the
is left hand, and, coming up the next furrow, throws the dirt

towards the ditch. So that every successive plowing raises the land towards the ditch, and increases the hollow, thereby preventing the water from running off latterally. It would be just as easy to reverse the plowing and produce the contrary effect. But besides this, I think it would be advisable to plow in such a manner, in breaking up the ground (the first plowing) as to leave it in beds of about twenty feet in width, taking care to make the last furrow very deep, or even deepen it with the spade if necessary, so as to allow a free intersection with the small cross ditches. By this means there would be no portion of the field of a greater length than 100 feet and of a greater width than twenty feet but would drain into a ditch. The importance of this draining on the surface will be felt when it is recollected that in the compact clay soils no filtration takes place. It may be seen in the fields after a rain, that the water will lie in a furrow a few feet distant from a deep ditch, until it is evaporated by the sun. The effects are, to keep the earth wet too long a time, and to scald the roots of the plant when the water is heated by the sun.

By plowing as above suggested for several years in succession, the middle of the space of 20 feet would be raised to a ridge, and facilitate much the draining which, on such lands, must necessarily be made on the surface.

No one will, I dare say, contest the necessity of draining. As very appropriately remarked by one of your contributors, it takes away from the earth the superabundant moisture coming up from below, by absorption or capillary attraction, and permits it to be earlier heated by the sun in the spring, thereby accelerating vegetation. This is important, as it gives the cane more time to grow and mature. There are planters, however, who think that cane planted in the whole of the month of March will turn out as well as that which is planted earlier. This is evidently an erroneous opinion, founded on incorrect observations, and perhaps from the circumstance that, early in the season, in the months of May and June, there is very little perceptible difference between that which is planted several weeks later and that which comes up as soon as the frost will permit. I have had occasion to see it last year in a field where every third row had been left out, and which was afterwards filled up, but yet in good time. When the cane began to have joints, the oldest was about one foot higher, and appeared to have kept as much ahead as there was difference of age between them. But yet this is not perhaps sufficient to determine the question as to which would turn out the best; it would be necessary for that purpose to plant two pieces contiguous, which would receive exactly the same culture. If we were permitted to judge by analogy with the effect of late or early planting on corn, there would be no doubt that late planting, that is the first of April, would retard the maturity of the cane at least two weeks. That much time in the fall about the time of the grinding season would be very important. Hence the propriety of accelerating vegetation as much as possible early in the spring, and thorough draining is one of the conditions first necessary.

The effect of ditching may be plainly seen in the cane field by the appearance of the cane on the sides of the ditches, where the dirt thrown up makes a little elevation, and where perfect draining is effected by filtration, the distance from the ditch being only a few feet. In such cases the cane is much larger and in a more thriving condition. And the remark holds good not only for a wet season, but also for the driest, from which it must be concluded that the moisture coming from below is injurious to the plant. It may be objected that the cane is larger on the side of the ditch because the ground is made richer by the mud thrown up from the bottom in cleaning it out. It is no doubt true that the ground is thus enriched; but I have to say in answer to the objection, that I have planted cane in an old field, that had not been cultivated for twenty years, where the ditches had not been touched, and I made the same observation that the cane was much larger in the row on the side of the ditch. Now, there is no reason why the whole field could not be made to produce as well as that single row.

The soil, deprived of its moisture, will admit of being saturated to a greater depth by rain water, which carries to the roots of the plants the chemical substances the most necessary to their growth. The principal among these is, the carbonic acid which it takes from the atmosphere, so greedily absorbed by plants. It dissolves in the earth substances which are, and can be absorbed by the roots, only in a liquid form, as has been shown by the experiments of chemists. Now, if the ground be not well drained, the moisture from below will rise by capillary attraction to within a few inches of the surface, which will be more or less dried by the heat of the sun. In this condition of the ground the rain water will only penetrate so far as it will meet the water from below, and the excess will run off; consequently giving less nutriment to the plant than if the porosity and dryness of the soil had admitted a greater quantity to penetrate. It is for this reason that the subsoil plow is so necessary in the clay lands. If it be run in the furrow which is opened to plant the cane, to a depth of several inches more than the ordinary plowing, it opens the compact soil below so as to admit of filtration, and the superabundant water seeking its own level, will follow the furrow and ooze out into the cross ditches. If the ordinary plowing be four or five inches, and the subsoil plowing as much more, it makes a depth of eight or ten inches which will be perfectly drained in the immediate neighborhood of the foot of the cane. This is probably deeper than the roots of the cane will reach. Let it be understood, however, that the depth here spoken of means that much below the surface if it was smooth, being much more if it be considered that the cane is hilled up to at least six inches above the surface, the dirt for that purpose being drawn up from between the rows, and leaving a hollow where it is taken from. This furrow should perhaps be, when the cultivation is finished, of an even depth with that of the subsoil plow, so that the height between the hollow and the hill around the stalk of the cane, will be near twelve inches, allowing the cane to be three inches in the ground, and hilled six inches, making nine inches. In this condition the excess of water will run off from the surface in the open furrow between the rows, and by filtration, in the furrow of the subsoil plow, immediately under the roots.

The operation of plowing and preparation of the ground for planting, is the most important branch of the process, and does not receive sufficient attention. It is generally done too late in the winter, and the earth not turned over to a sufficient depth. It ought to be at least five inches, particularly in stiff lands. The usual mode is to plow each way alternately, the mould-board throwing the dirt off on either side, leaving open furrows at the distance of six feet. It is in these furrows, afterwards opened or widened with a Flucker plow, that the cane is planted. Such plowing is evidently defective. The plant cane is put immediately upon firm, compact ground, that has not been stirred, and is as much below the surface as the depth of the plowing. The furrow where the cane is thus planted is the lowest part of the plowed ground. If there be excess of water, in seeking its own level it will lie in the bottom of the furrow immediately under the cane, and cause it much injury in a wet season. Moreover, the roots will not find any nutriment in this hard soil, where they could not spread. If the season be very dry, the stirred earth will become dry, being but a thin layer, and the roots not penetrating deep enough, will not reach the moisture which they would have found, had the layer of stirred ground been loosened beneath them. It is expedient, then, that the plowing should be done in such a manner as to avoid these inconveniences and to secure all possible advantages: that is, to place the cane in such a situation that it will not suffer, neither from the excess of water nor the want of it. In the first place, it should be planted above the surface, or what was the surface before plowing, leaving several inches of stirred ground underneath, through which the water could escape by filtration; and in the second place, it should be sufficiently covered to prevent its being exposed to suffer by a drought, and not too much to prevent vegetation. A covering of between two and three inches would probably be sufficient. In order to plant the cane at such an elevation, it would be necessary to throw up a ridge on the right hand of the plow, by running three furrows on each side. If the rows are not to be more than six feet apart, the intervening space between the rows would all be broken up by the six furrows. If they were to be more than six feet apart, the six furrows would still answer, if time were pressing, but it would be better if the whole were plowed up.

The best time to break up the ground is in the month of December, so that the earth turned up may be exposed to as much freezing weather as possible. The effect is to cause it to crumble and become friable. That is the condition the most favorable to the growth of plants, allowing the roots to spread freely in every direction. Land thus prepared, especially clay land, is not so liable to become hard in the spring, and in fact it will not become so, unless there be a great deal of hard, beating rain. Care should be taken not to plow the ground when it is too wet. The soil of stiff clay lands is somewhat porous, and will admit of compression. The clods raised by the plow, if dried immediately by the sun, would become as hard as unburnt bricks, and it would require a great deal of rain to melt them. If the season should continue to be dry after such plowing, the bad effect of it is plain. The ground should not be plowed unless it be sufficiently dry to crumble, or at least not to form into large lumps. The stiff lands that are turned over early in winter become extremely friable, ierally remain so throughout the season, thus giving great facil- the cultivation of the crop, and procures the advantages already ned of being more permeable to rain water and the moisture atmosphere which reach the roots through the open pores. The lowing I shall have occasion to speak of in treating of the g and cultivating of the cane.

plows used are often badly constructed, and used out of time ce. They require to be of different models according to the of the soil, and the ends to be attained. I would suggest breaking up in stiff lands the shear of the plow should be so as to admit of plowing deep without straining the teams. ls that are matted with roots of grass it requires four mules, Jacob's plow, the most approved model, to plow to the depth of ches. If the plow was narrower, the same force would admit g deeper. It would be more convenient to diminish the width plow than to increase the team, which would become unwieldy. int of many of the patent plows is made too sharp; that is, the f elevation from the point upwards, is not sufficiently great. nsequence of it is that the clod is pressed against the mould- before it is detached, causing a considerable resistance in the t. If the point from the angle were more obtuse, and the mould- hrown a very little further back, the clod would be raised more licularly upwards, and detached before being thrown aside. ip of ground turned up by the plow is in the proportion of four n thickness to ten or twelve in width. The plow enters in the a wedge. If the direction of the force of the wedge be from pwards, it is clear that the strip of ground is more easily de- than if the direction was lateral. Both directions must be ed to a proper degree, which I think very difficult to hit upon actual experiment. The practical plowman will very readily the difference between the ordinary plows and one constructed above principles, and so will the mules that have it to pull.

III.—*Planting and Cultivating.*

operation of planting is very simple. It consists in laying n the furrow prepared for the purpose, as has been said above, l cane, and covering it over with loose dirt to the depth of a hes. It may be planted at any time in the winter or spring, late as sometime in April: and I have seen tolerably good oduced, planted as late as the first of May. But when it is so late, it also ripens later. In such cases it is left standing last cutting, or is put up for seed cane. When planted in win- ould be covered a little deeper to protect it from freezing, and the spring, some of the dirt may be scraped off with the hoe come up freely. If a heavy beating rain should fall before has come up, it is well to run a light harrow over it to loosen even at the risk of breaking off some of the young shoots. In ls the cane ripens better, and may be planted in rows six feet here it does not grow very large, and placing two or three le by side in the furrow. Care should be taken to separate them so that they should not be in contact. If they were, some of the buds that would be turned downward could not come up. If the seed cane used, are rattoons, the knots of which are nearer together, two canes would be enough. In new lands it is well to give the cane more space, either placing the rows eight or nine feet apart, or at six feet, leaving out every third row to be planted in corn. The richer the land, the farther apart they should be planted, to give them air and sunshine. When they are too much shaded by their own foliage, they do not ripen well. There are several advantages obtained by planting the rows wide apart. It admits of plowing between the rows with a two horse plow, and it diminishes the number of rows to be cultivated, causing an economy of labor. The cane grows larger and heavier, compensating in size for the reduced number. In ordinary seasons there would be very little difference in the yield of an arpent planted at six feet, and the same planted at nine, or at six, leaving out every third row. There would be an ecenomy of a third of the work of the hoe, which is long and tedious, and somewhat less plowing also, as frequently when the ground has been previously well prepared, it is sufficient to run one or two furrows on each side of the cane for the first plowings. Besides this, the odd row left may be planted in corn, without any or very little injury to the cane. The corn comes to maturity and withers away early in August, before the cane has attained half its size. Peas may also be planted in the corn row at the last plowing, with advantage, either for a crop of peas or forage.

The proper selection of the seed cane is a very important matter, particularly in old lands where the cane does not grow very large. The custom of many planters, to put up their worse cane for seed, is one attended with consequences that are surely not well considered. It is a fact universally admitted, that plants continually reproduced from the same seed, in the same soil, tend to degenerate. The change of seed from distant places is beneficial to the crop, but in the case of the sugar cane it cannot be done, on account of its great bulk. The costs of transportation would be too great. This tendency to degeneration would be measurably remedied, if not entirely avoided, by selecting the largest and most vigorous cane for seed. It would, perhaps, not be going too far to say that the plant might be improved by a constant attention to this practice. It is a thing familiar to all gardeners and cultivators of grain, that the most forward and largest seeds are selected for planting. There is no reason why the same rule should not obtain with regard to the sugar cane. It is possible and probable, that the ripest seed cane will yield the most forward crop The calculation of the planter who puts up his poorest cane for seed, is to send so much of the good cane for grinding to make sugar. Accurate observations during a few years would convince him of his error. If I am not mistaken, the cultivation of indigo was abandoned in this country on account of the degeneration of the plant. The quality of the product had ceased to be as good, and the crop became precarious.

The cultivation of the cane should commence as soon as it has sprung up out of the ground. Two conditions are essentially necessary to its flourishing, to keep it free from grass, and that the ground should be stirred about the roots. The first plowing should be done with a small plow, the mould board turned off from it, in order not to hurt the young plant, and to run as near as possible to the roots. The next furrow should be run, turning the mould board the other way, so as to throw the dirt back into the first. At the second plowing one furrow more should be run, making a space of about two feet in width, of stirred ground on each side of the row. By this time the cane will be high enough to allow throwing the dirt to its foot. A larger plow should now be used to hill it up, turning the mould board towards the row, and avoid unnecessarily cutting the roots, if the ground be in good order, by passing at the distance of at least one foot. A part of this operation, however, will have to be done by the hoe. There should be no hesitation in cutting the roots, if it were necessary to be done to put the ground in good order. The dirt thrown to the roots protects them against the drought, or too great heat of the sun in the months of May and June, before the leaves have grown large. Later in the season it contributes to sustain the cane, and prevent it from being blown down, an occurrence which is not unusual. It is particularly necessary when the ground has been well plowed, and is friable to a certain depth. For this reason: some planters pretend that it is better to plant the cane in firm ground, where the roots will sustain it better. The evils of such a way of planting have been pointed out, and not counterbalanced by the sole advantage thus obtained. When the operation of hilling up is finished, there should be at least one foot of the cane imbedded in dirt. The higher it is, the better will the rattoons be protected against the cold. The ground sometimes freezes to the depth of two or three inches. The buds that are near the surface are killed, but there are enough left for a good stand. It is important that the last open furrow between the two rows should be deep enough to drain off the water from the rattoons. It has been observed that they are more liable to freeze when the water lies about them. In the spring the ridge is cut down a few inches, to facilitate the shooting up of the buds; and the top of the rattoon, which is frozen, cut off smooth with the ground. This should not be done until the latest white frosts; otherwise, if it was severe, it might kill the buds entirely. If the frost is light, it causes very little injury to the cane that has come up, merely burning the leaves to the edge of the ground. Last year might have been seen the evil consequences of not hilling up sufficiently high. The winter was very mild, and the rattoons sprung up several inches in height. Severe frosts successively cut them down and killed most of them. There were not enough left for a stand when the spring came, and in some places they were almost entirely destroyed, and not worth cultivating. Prudent planters always keep a sufficiency of plant cane to guard partially against a contingency of this sort. Although it may be remarked, that the rattoons are not often affected by the frost, yet, it is sufficient that it may occur once in four or five years, to warrant some precaution to preserve them, in case of an unfavorable season. In light, sandy soils they are much better preserved than in stiff lands, which is, no doubt, to be attributed to more perfect draining in the first.

An experiment has been made by a planter, which consisted in plowing late in the season, when the cane was quite large, runn shear of the plow next and close to the foot of the cane, s cut the roots. A few rows only in the piece were plowed in th ner, and the balance in the ordinary way. He remarked a few afterwards that the cane in the rows thus plowed appeared lon in a more thriving condition. A single experiment of this perhaps, not sufficient to warrant the practice. There are m cumstances to be taken into account; such as the manner in w may be affected by the subsequent sort of weather, etc., which be carefully noted, and particularly if it do not retard the m The advantage of stirring the ground about the roots of a obvious. The pores being open, the roots spread to a greate and absorb a greater quantity of nutriment from the earth. T may absorb in a given time all that the earth contained in thei diate neighborhood, that was of a nature to be assimilated to th If, in this condition the roots are cut, and the ground disturb spread out again very quickly into new unexhausted soil. The of new roots is very rapid when the plant is large, and th the soil, the more is their sphere of action extended. Hence be inferred that it is erroneous to suppose, as some do, that it rious to a plant to cut the roots and stir the ground in a very d If the soil is dry and has not been stirred for a long time, t tion is null; because their functions require moisture, and the so them is exhausted. Then no harm is done by cutting them plow throws up some moist earth from below, in which the ro spread anew, and they besides find some moisture coming fr night dews which penetrate more or less through the pores freshly stirred earth. If at this time there should come a sh finds the plants in the most favorable condition to be benefitte If these hypothesis be correct, no dry weather should preve plowing.

When the ground is very wet, it is not advisable to plow. been said already, the clods raised by the plow are liable to hardened by drying in the sun, and it requires a great deal of make them crumble again. If a dry spell should set in aft plowing, it is obvious that it would have done harm instead o If it should rain again immediately after, the grass will not be It is better then not to plow at all.

As a general rule, after a heavy rain, the whole field sh plowed over as soon as possible. The ground is rendered com rain, and if too long a time is allowed to intervene before plo becomes hard and is then in an unfavorable condition for the rous growth of plants. There is little necessity of going o ground a second time without a shower of rain intervening b the two plowings, but generally, the field should be plowed ev teen days until the crop is finished. The quantity of arpent one plowman can attend is about fifteen, without taking into the work of the hoe, which is done by another hand, but son much may be allowed to one plow. The quantity of work th be performed by the plow depends much upon the season, a manner in which the ground has been prepared. If it should wet, there is necessarily time lost; not only during the time that the rain falls, but also during the time that the ground is too wet to plow. If on the contrary, it should be very dry during the cultivating season, one plow may attend as much as thirty arpents. The crop may then be planted in view of such contigencies. The chance of cultivating the greatest possible quantity amply compensates the loss of labor which may be experienced if a portion had to be abandoned. It would be injudicious to cultivate imperfectly too large a quantity. In case of an unfavorable season, it is best to sacrifice and abandon at once that which cannot be cultivated well. In general, it is safest to replant every year one-third of the quantity of land cultivated, although it should be necessary for so doing to destroy rattoons which might be good. They sometimes make very good cane the third and fourth years; but it would not be prudent to depend upon it, especially in old and worn out lands. In new lands they are better and make better cane than the plant. In either case they ripen somewhat earlier than the plant cane. In fresh lands, which are always friable, and where there is not much grass, less plowing is necessary to keep the cane in a good growing condition. But in old lands, where there is more grass, the labor is much greater, and plowing should be repeated every ten or twelve days.

IV.—*Of Seed Cane, Time of Cutting, and Mode of Preserving it.*

The seed cane should be cut down as late as possible before the frost attacks it. But it has to be cut during the month of October, in order that the operation may be finished before the end of the month, which is the time to begin to grind. I have had occasion, on the subject of planting, to make some remarks on the quality of the seed cane, which it is unnecessary to repeat. The most usual way of preserving it, is to put it in beds, about two feet in thickness, leaves and all. It preserves very well thus, and is not affected by cold, except sometimes on the edges of the beds, and in places where it is not covered by the leaves. I have heard old planters say, that a cane frozen to an icicle will grow very well, provided it is put immediately in the ground, and not exposed to thaw. However, it does not require a very severe frost to kill the buds when the cane is standing. Some planters pretend that it is better to make the beds when the dew is upon the cane, or whilst it is wet by the rain. Others have put it up several days after cutting, when it was dry, and it has preserved equally well. There is one condition, however, more essential—it is, that it should be as full of sap as possible. If it is cut down after a dry spell, it is apt to have the dry rot, and becomes hollow, many of the buds losing their vitality. In such cases, it is better to suspend the operation, if possible, and wait for the benefit of a shower of rain. When the first killing frost comes late, and the grinding is commenced early, the tops may be saved, and make very good plant, if the cane be large. In that case, the cane is cut a little lower, so as to leave four or five well formed joints.

A very singular effect has been observed in a field where the cane has been cut down at various times, within the space of twenty or thirty days. It is, that in some portions of the field, the rattoons have come up very well, and in others very poorly, and by patches, the whole of the field being of the same quality of land, and the cane to all appearance being in the same condition: the effect seeming to have been caused only by the different time of cutting. I saw, last year, in a field of 150 arpents of rattoons, one single spot of about five arpents that had come up extremely well, and thick enough for a good stand, whilst the balance of the rattoons on either side of the piece were very poor, and so scattering as to be scarcely worth cultivating; and they were not good in any other part of the field. There was no perceptible difference in the condition of the cane, the soil, the ditching, or the subsequent cultivation. It would be interesting to direct some observations to the discovery of the cause of so strange a phenomenon. It would hardly seem serious to attribute it to some occult influence of the moon; I say occult influence, because there is nothing in it which we can account for by any ordinary process of reasoning in such matters. There are things, however, which do not come under the apprehension of any of our senses, which still we are forced to believe. The rays of the moon are not known to possess any power capable of modifying anything above or under the surface of the earth. They have neither heat, nor moisture, nor electricity, and in fact nothing that we can appreciate, except light. Is that the agent? I put the query, but do not answer it. Is it the time of cutting, during any particular quarter or phase of the moon? What is the influence of the moonlight? It deserves an experiment.

V.—*Of Grinding, and Making Sugar in Open Kettles, Defecation, Boiling, Cooling, and Purging.*

The cane generally continues to ripen until it is frozen. The longer it can be left standing, the more it will yield. The cold weather and white frosts accelerate its maturity by checking vegetation. The time of grinding is frequently regulated by the quantity of the crop on hand, with reference to the force which the planter has at his disposal, and his means for manufacturing the cane into sugar. There are various matters to be taken into consideration. The grinding should be finished as early as possible, to give time for preparing for the next crop, such as plowing, keeping the plantation in good order, making improvements, etc., etc. If the cane is ground too soon, the yield will not be so great. These are matters of calculation which the planter should make, and combine the whole, according to circumstances, to the best advantage. In general, the operation may be commenced about the 20th of October. It is about this time that the first white frost may be looked for. By doing a portion of the work early in the season, the balance remaining to be done is more under control, in case of a sudden and unexpected freeze. It requires about two months to take off the crop when it is proportioned to the force. The vegetation of cane is not entirely checked until the weather is cold enough for ice. It should then be winrowed by throwing several rows together, laying it down carefully, so that it may be covered by the leaves. If the cane is large and well furnished with leaves, it will be sufficient to put

s together, but otherwise, it is better to put three or four. It
hus preserved until it is convenient to grind it. If a warm
weather should set in after a freeze, the cane standing would,
few days, become sour and unfit to make sugar; but it will
good as long as the weather continues cold. It causes some
abor to winrow the cane, and hence a small portion is always
ding, to be immediately cut for the mill before it has time to
f the cane should be winrowed too early, before the vegetation
ed, it would be apt to sprout and vegetate on the ground, which
estroy the saccharine matter. It is not safe, however, to let
later than the 15th of November, the time that ice may be
l.

op of the cane being the most tender part freezes first, and
sours it begins also by the top, and comes gradually down;
is then had to cut it off always below the part that is spoiled.
antage of winrowing is two-fold; it protects the cane against
ts of the sun, and being in a horizontal position, the sap from
part does not come down so fast. It may be seen upon cut-
ozen cane in two, that the juice will ooze out from the upper
of the cut. It may be counted a lucky circumstance for a
to have just cold weather and ice enough to check entirely the
n, and afterwards a continuation of cold long enough to allow
w all his cane. The making sure of saving all the cane would
more than counterbalance the benefit that would be derived
ing it stand a little longer to ripen. This is frequently the
some cane being lost, and is an imprudent practice.

king the preparations for taking off a crop, two ends should be
view: letting the cane stand the longest possible time to
and then to grind it up in the shortest time, to save it before
irely frozen. Any contrivance then, by which the grinding
hastened becomes important. The greatest labor is to get the
to the mill. Although the mill should be of just sufficient
grind it as fast as it could be brought, and the kettles be of
surate dimensions, yet some economy of labor may be intro-
In the case just supposed, there is an indispensable number
s required about the sugar-house, to attend the engine, kettles,
up the sugar into hogsheads, &c., &c., and that these hands
replaced in the night during a period of necessary rest. Now,
ake for example, an establishment making six hogsheads of
twenty-four hours, the number of hands will not be less than
. If the mill and kettles were of double the capacity, the
ould not be proportionally increased; three or four more would
The quantity of fuel would not be proportionally increased
as very little more fuel would suffice for the augmented
he kettles and boilers. These augmented apparatus' could
upplied, it is true; but let us see what would be the result of
eration. Before starting the mill, all hands could be put at
, and get up a large quantity in advance. The carts would
to run until the mill should have caught up with them.
ng that the quantity hauled up by this time was equal to 24
ds, instead of fourteen hands being employed four days to

make them, they would be made in two days by seventeen or eighteen hands. The economy in labor would be equal to one day's work of twenty men, and the economy in fuel would also be very great. Many planters use four kettles only, and probably one of the inducements to it is, that they appear to require less hands to work them, and the opinion is common that the sugar is of a better quality, although no reason is assigned for it. If the size should be somewhat increased, and two large ones added, it is still but one and the same fire that would be used with a very little augmentation of fuel. The manner of splitting the wood also, is a matter of more importance than some persons attach to it. The fuel that produces the most flame is the best, because it has to pass a long distance under the row of kettles. If the combustible be of such a nature as to make coal instead of blaze, the kettle alone under which the fire is made will be heated, and that imperfectly. Now, the larger is the wood, the less flame it makes in burning. It is probable that a given number of pieces of wood of the size of three inches square, would give as much blaze as the same number of double the size. The smaller it is split, then, the further it will go. There is an economy in splitting it up small, not only in the wood itself, but also of time of boiling.

The usual way of defecating the juice is to put in the *grande* or large kettle a certain quantity of lime, such as is found by experiment to be sufficient. It requires about half an hour, when the kettles are heated and going, for the *grande* to boil, from the time that the cane juice is put into it. As soon as it begins to boil, the scum and impurities, and albumen, coagulated by heat, float on the surface and are skimmed off with a ladle. But the period of time for doing it is very short, not more than five minutes, because the ebulition at a more advanced stage causes froth, and disturbs the crust of scum which had come to the surface. It is then time to transfer the juice to the second kettle, when it has been but imperfectly skimmed. It would not be difficult to regulate the fire of the *grande* by a damper, which would shut the fire from it just at the point of ebulition and give time to skim it well. As the action of the *grande* would be retarded by this, it would become necessary to make it furnish cleansed juice fast enough for the other kettles, either to have it larger if it were convenient, or to have two instead of one. The two would probably be better, because they would take less time to boil than the large one. A violent fire to the *grande* causes scales to be formed on its bottom and sides of the impurities contained in the juice, which, by their own gravity, go to the bottom. These scales are burned to a cinder and communicate a red color to the sugar. If the fire was regulated, these inconveniences would be avoided.

It would be desirable that the fire under the battery could be regulated also, so as to be able to check it when the granulation point should have been reached, and until its contents are transferred in the coolers. The most expert and attentive sugar maker cannot always take off a strike at the proper point. He is obliged to begin to throw it off a little while before it has reached the point of granulation, because the bulk of the syrup to be evaporated being considerably *reduced*, and the heat greater on account of the density of the liquid being increased, it requres but a very few minutes for the point of granulation to be passed. If, on the other hand, he waits to throw off until the proper point is reached, then the last ladle-fulls will be boiled too much. In either case, the strike taken off is imperfect; either a portion of it is not boiled enough, or boiled too much, besides which, when the last ladle-fulls are being thrown off, the sides of the kettle are left bare and a portion of the sugar is burnt. These are the imperfections to be remedied. How it is to be done, in a cheap and simple manner, claims the attention of the planters, and should excite the ingenuity of kettle setters. These craftsmen have very exalted ideas of the perfection to which they have attained in their art, when, in truth, they do nothing but random and guess-work, to the sad experience of some of the planters. It would perhaps be well to have two batteries instead of one, and have them so arranged that by checking the fire to attain slowly and surely the exact point of granulation, and to throw off the strike without burning the sugar.

It is usual for the sugar-makers, (to use their expression) to run upon several *bacs* or coolers; that is, to throw the strikes taken off into four or five coolers successively. The consequence of such a practice is that layers a few inches thick are formed, on the top of each of which there is a hard crust, which retains the molasses, and which is so hard when the sugar has granulated that it is impossible for the molasses from the upper layer to run through it. They say, and it is true, that if they were to fill one single cooler at once, by throwing several successive strikes into it, that the sugar would remain hot too long in it, and would continue to cook and be cooked too much. No better proof need be adduced that the boiling is carried too far. It necessarily reddens the sugar and creates molasses, or a substance that is not crystalizable. If those layers above mentioned were not formed in the coolers, the molasses might be in great part taken out by making holes at the bottom, which would carry it by a gutter to the cistern. The sugar thus treated would contain much less molasses when put into the hogsheads to drain, would drain better, and, consequently, be of a brighter color. By putting molasses and all into the hogshead, that which is on the top has to run through the whole of the hogshead, a height of about four feet. Now, the work of crystalization is going n while the molasses is yet present, and portions of it are absorbed with the water of crystalization, and attach also to the sides of the rystals, giving to the sugar a red color. Hence it is that sugar becomes of a brighter color by liquoring. The liquid which is put upon t, usually syrup of a low density, displaces the molasses and coloring matter in the sugar and takes its place. Chemical analysis, if I recollect ight, shows that sugar contains about forty per cent. of water.* If hat liquid be limpid and colorless, the sugar will be white. A proof f the correctness of the above hypothesis is that the tops of the hogsheads, which are the soonest free of molasses, are always of a brighter color, and some almost white, and are a choice quality of sugar, whilst he other parts of the hogshead are darker and more damp, and the bottom remains always an inferior article. The vices of the system, then, are apparent, and may be easily remedied, with little trouble and expense, by a slight modification of the present contrivances, in accordance with the principles above set forth. But, after all, were all the defects remedied which I have and have not pointed out, and that sugar-making be rendered as perfect as it can possibly be, it is a question whether the new apparatus for making white sugar are not preferable for plantations of a sufficient magnitude to warrant the expense. The consideration of these requires more exact observations than I have made, and more precise data than I possess. The use of them is attended with a great economy of fuel, a matter which is important for lower Louisiana, where the wood is daily becoming more scarce. The quantity of wood which they consume, is something more than one cord per hogshead of sugar, whilst, by the old process, it requires about three, and often more. It is asserted that they produce more weight of sugar from the same quantity of cane. The late numbers of De Bow's Commercial Review contain some valuable articles on the subject. But the curious inquirer would do well to visit the establishments in actual activity, which are well worth a visit.

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*Quere?—[Ed.

THE POST SYSTEM.*

As our country expands, and its circle of business and correspondence enlarges; as civilization progresses, it becomes more important to maintain between the different sections of our country a speedy, safe, and cheap intercourse. By so doing, energy is infused into the trade of the country; the business of the people enlarged and made more active, and an irresistible impulse given to industry of every kind; by it wealth is created and diffused in numberless ways throughout the community, and the most noble and generous feelings of our nature, between distant friends, are cherished and preserved, and the Union itself more closely bound together.—[*Report of Cave Johnson, Postmaster General, December* 1847.

The early history of this institution, and its establishment in England, so far as we have been able to trace it will be found in a previous number of the Review. Our purpose now is to present in as brief a manner as possible, the laws and regulations by which it is governed in other portions of Europe and in the United States particularly.

And first of France. Louis XI sometime about 1476, established a line of Posts for the speedy conveyance of letters through the kingdom. It does not appear, however that the accommodation of the public was at all regarded in this arrangement, devoted as it was exclusively to the service of the State. From the period when the nation became independent of the Roman dominion, up to the time of which we speak. we have no evidence that the system was in operation, so far as the government was concerned. How long the King's service required the exclusive monopoly of the Posts has not been clearly determined. We are informed, however, that for some time previous to, and in 1630 a comptroller of Posts and Postmasters was appointed, whose duty it was to receive the revenues. The Minister Louvois, under thereign of Louis XIV, in 1676, farmed out the Posts to a man named Patin, to whom was entrusted its entire regulation. This idea was probably taken from England, £10,000 having been received by that government from John Manly, Esq., as early as 1652 for the postage of England, Ireland and Scotland.

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* In the second number of the 3d volume of our Review, the paper was commenced, of which this is a continuation. The time of the writer has been so unceasingly employed as to prevent an earlier recurrence to the subject. The authorities consulted at that time have availed him in his further investigations.

In 1695 an unconditional sale of the Posts was made by auction, the revenue of which was estimated at that time at 2,000,000 francs. The length of time comprehended under the sale can only be inferred from the fact of the establishment having been taken under royal management in 1738. The clear income which it produced in 1791 was 11,000,000 francs.

In 1829 the revenue from the Post office in Paris was estimated at 4,310.000 francs. Forty thousand letters were daily sent into the interior and abroad, of which 30,000 paid postage. Of the number that arrived daily amounting to 30,000 only 18,000 paid postage. From this then it appears that the number of letters which yearly arrived and were sent from the Post office at Paris were not less than 25,550,000 equal to about one half the number of letters passing through the United States mail.

From the time of Louis XV to a late period the general intendants of the Post office Department in France were selected from persons of the highest rank as is the case in Spain, and Italy. In 1808 a work entitled the *Instruction Generale Sur le Service des Postes*, was published for the guidance of those to whom this branch of the service was confided, and is we believe still in force. All the mails are accompanied by couriers of responsible character (*Service des Malles*) employed to transport money and individuals.

Upon a single letter the French postage is very reasonable, the highest price to any part of the kingdom being one franc. The increase in the price of letters with the increasing weight, however, is otherwise; the ratio of the French, being in proportion much heavier than the English system. "Recommended" letters even pay double. Patterns of goods are charged one third of letter postage, newspapers into the interior pay but four centimes a sheet, and out of the kingdom eight. The Prussian system of 1824 was quite different from this. Printed matter, prohibited from being carried in the public letter mails, was transferred to the baggage wagons of the government.

Every postmaster is required to take an oath to preserve the inviolability of letters. The secret police, however, seem to be endowed with the privilege of breaking seals at their discretion, which they frequently exercise to a great extent. Letters sent by the commercial couriers from Paris to London, in 1825, are known to have been broken open.

As an evidence of the increase of speed which modern science has enabled us to attain, we may remark here that, in 1792, the time consumed in making the journey from Paris to Lyons was ten days. But three days was occupied in 1829. The history of the Post system in our own country exhibits much stronger examples.

The post offices in France are discontinued as soon as it is ascertained that the revenue does not amount to 4000 francs. This practice, if engrafted upon our system, would cause the destruction of a great number of offices, and be a source of considerable inconvenience to a large portion of our citizens.

The letter carriers in Paris number about 400. They deliver letters six times a day during the week, and five times a day on Sundays and holidays.

FRENCH POST OFFICE.

Estimated ratio of Distances.

40 kilomètres (about 25 miles) inclusive	(2 decimes)	about 4 cts.
From 40 to 80 "	3 "	" 6 "
" 80 to 150 "	4 "	" 8 "
" 150 to 220 "	5 "	" 10 "
" 220 to 300 "	6 "	" 12 "
" 300 to 400 "	7 "	" 14 "
" 400 to 500 "	8 "	" 16 "
" 500 to 600 "	9 "	" 18 "
" 600 to 700 "	10 "	" 20 "
" 750 to 900 "	11 "	" 22 "
" 900 and above	12 "	" 24 "

Estimated ratio of Weight.

Under 7 1-2 grammes (about 1-4 ounce)	1 postage.
From 7 1-2 to 10 " 1-3 "	1 1-2 "
" 10 to 15 " 1-2 "	2 "

and so on for every five grammes half a postage additional.

We come now to Prussia. The rule of charging postage upon letters at their place of delivery, whether prepaid or not, is invariably applied, and may be noticed as one of the peculiar features of the system, which prevails under this government. The charge is regulated by *distance* and *weight*, as in France. The average number of letters daily received in the Berlin postoffice is 8500, and those sent through about 9000.

Scale of Postage according to Distance.

A distance of 2 miles,	1 silver grosch,
From 2 to 4	1 1-2 " "
" 4 to 7	2 " "
" 7 to 10	2 1-2 " "
" 10 to 15	3 " "
" 15 to 20	4 " "

and so on calculating one silver grosch for every additional 10 miles.[*]

The scale of Weight is as follows.

From 3-4 to 1 loth[†]	1 1-2 postage,
" 1 to 1 1-2 "	2 "
" 1 1-2 to 2 "	2 1-2 "

and so on, an additional charge being made for every increased half loth in the weight. For letters that do not exceed in weight 3-4 of a loth, but single postage is paid.

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[*] One German is about equal to 4 3-4 English miles.

[†] Two Loths make one English ounce.

The travelling Post furnishes the means of conveying silver from one point to another. The rates established are entirely distinct from those which govern other postages. Drafts and gold pay half the postage charged for silver.

A singular fact is related by Thomas Raikes, Esq., in his "City of the Czar," strongly corroborative of the degree of watchfulness which appears inseparable from all governments founded upon the principles of despotism. A gentleman attached to the Russian Embassy requested Mr. R. to take charge of a letter for the Grand Duchess, Helen, to be delivered as soon after his arrival as might be convenient to him. With as little delay as possible he despatched his servant with the packet, instructing him to deliver it into the hands of her Imperial Highness, Chamberlain. Had it been infected, this worthy functionary could not have recoiled with greater horror from the touch, or have refused more absolutely to receive it. To be relieved of his trust, he found it necessary to declare his name and exhibit his passport. By some, this extreme caution has been ascribed to a dread of unpleasant intelligence, but to what cause soever it may be attributed, we cannot but regard it as the relic of a barborous age. The embarrassments of which it may be well conceived to be the occasion among themselves, and the offensive feeling it produces in the minds of foreigners, should long since have furnished the arguments for its overthrow. But it is too often the case that "they who live upon hope, die fasting," and the application in this case is not without its moral.

To those who may have become obnoxious to the government, or in the slightest degree have incurred its suspicion, the General Post in Russia is the cause of unceasing anxiety and disquietude. No seal is held sacred, and unless foreigners are particularly guarded in their allusions to political events, they are likely to involve their friends in serious embarrassments.

Although Russia is twice as large as all Europe, with a population of over forty millions, the revenue from her postal establishment does not exceed $600,000. The rates, however, are extremely moderate. A letter of an ounce weight pays two copecks* for every hundred versts.† This is the rule up to 1500 versts. For any distance between 1500 and 3000 versts only one copeck additional is paid, and for any distance over 3000 versts, fifty copecks. In that immense Empire letters are sent from 6000 to 7000 versts.

In DENMARK, no particular arrangement appears to distinguish the Posts, unless its management so as to produce the largest amount of revenue, may be so considered.

In SWEDEN and NORWAY, the postage is more moderate than in many of the neighboring States. Posts were established in the NETHERLANDS by the ancestors of the princely house of Taxis. In 1513 the station of Postmaster General of the Netherlands was held by Leonard Von Taxis. The Post system of England appears to have been the model which they have taken in later times.

In the LOMBARDO-VENETIAN KINGDOM, in TUSCANY, PARMA and Mo-

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*The amount of two copecks in weight of copper is little more than a cent.

†A verst is about two-thirds of an English mile.

DENA, the Post system for the last thirty years has been instituted more after the Austrian model, while it retained the French basis. They have continued the same in other States of Italy, with some slight modifications.

In SWITZERLAND, the regulation of the Posts is confined to each canton. As may be readily conceived, they are variously managed, and with more or less of merit in each. No extra Posts are to be found any where in Switzerland.

In SPAIN and PORTUGAL, the establishments are in a very low and defective condition, though a *Cerreo Mayor.* as Director General presides over them. In no State are they entirely in their infancy except in European Turkey. No change or improvement has been evident in them for centuries. Mounted Tartars are maintained by the Grand Signor, to whom all the despatches of the public authorities are confided. Remarkable celerity characterise their movements.

Having thus traced with more brevity perhaps than will be consistent with a clear understanding of the operations of the system in other portions of the world, we are brought at once to the consideration of the establishment as it exists in the UNITED STATES. As early as 1692, there apperrs to have been an inclination in England to establish Posts in the North American Colonies. Mr. Neal was named as the Postmaster General for Virginia, as well as other portions of America. The act passed by the Virginia Assembly, conformably with this intention was never carried into effect, however. An act of Parliament "for establishing a General Postoffice for all Her Majesty's dominions," was passed in 1770, and the first Postoffice was soon after established in the Colonies. New York was selected as the most proper location for the chief letter office, with the privilege conferred upon the Postmaster General of establishing other chief offices in such places as in his discretion should be deemed most conducive to the general interest and convenience.

Upon the adoption of the Constitution of the United States, in 1789, the power was exclusively confided to Congress, "to establish post offices and post roads" throughout the United States. Though eighty years had elapsed between this period and the introduction of the system into the Colonies, the institution was yet in a state of infancy. Difficulties of the most alarming magnitude seemed to surround every effort of the government, which, superadded to the untried energies of the people and the natural obstructions inseparable from a new and almost unexplored country, may measurably account for the very uncertain progress which marked its early career and development. We extract from Hazard's Register, under the head of "Travelling in the Olden Time," a notice which appeared in Andrew Bradford's Philadelphia Mercury, of March 1722–3.

> "This is to give Notice, unto Gentlemen, Merchants, Tradesmen, Travellers and others, that SOLOMON SMITH and JAMES MOORE, of *Burlington*, Keepeth two *stage wagons* intending to go from Burlington to Amboy and back from Amboy to Burlington again, Once every Week or off'tenr if the Business presents. They have also a very good storehouse, very Commodious for the Storing of all sorts of merchants Goods, free from any Charges, where good Care will be taken *of all sorts of* Goods."

How is this feat of enterprise regarded in the present day? or how would our modern carpers relish the reservation contained in the contract of the proprietors of the first line established between Bordentown and New York in 1734, to be at New York "*once a week, if wind and weather permit?*"

But every year brings its innovations and improvements. Man is progressive in his nature, and all the aids of science and of art are pressed into his service to carry out his high resolves, his adventurous daring and his brilliant conceptions.

In October, 1750, a new line was established. The owner informed all ladies and gentlemen who had occasion to transport themselves, or goods of any kind, from New York to Philadelphia, that he had a "stage-boat" which, "wind and weather permitting," would "leave New York every *Wednesday*, for the ferry at Amboy on *Thursday*—where, on *Friday*, a stage-wagon would be ready to *proceed immediately* to Bordentown, where they would take another stage-boat for Philadelphia." As an evidence of the great increase of speed which had been attained even at this time, it is stated that the passages by this route were made in less time, by *forty-eight* hours, than any other line. Hence we find it was well encouraged, passengers scarcely ever being kept longer than from *five to seven days on the route.*

The boat employed between Amboy and New York, seems to have possessed superior attractions. It is described as having a "fine, commodious cabin, fitted up with a *tea table and sundry other articles.*" The stage line between Trenton and Perth Amboy, established in 1756, performed the journey in three days, and by the celerity of their movements, were modestly styled "flying machines."

We find the following in Hazard's Register for 1828:

"GENERAL POSTOFFICE, Philadelphia, February 11th, 1755.

"It having been found very inconvenient to persons concerned in trade, that the mail from *Philadelphia to New England* sets out once a fortnight, during the winter season: This is to give notice that the New England mail will henceforth go once a week, the year round, whereby correspondence may be carried on and answers obtained to letters from *Philadelphia and Boston*, in *three weeks*, which used in winter to require *six weeks*.

"By command of the Deputy Postmaster General.

"WILLIAM FRANKLIN, *Comptroller.*

"Penn. Gazette, 1755."

In a report communicated to Congress on the 17th December, 1803, by Mr. Thomas, Chairman of the Committee of Post Offices and Post-roads, will be found the first proposition for the establishment of a direct post route from Washington to New Orleans. At that time the mail was conveyed on a circuitous route to Knoxville and Nashville in Tennessee, and thence through the wilderness by Natchez to New Orleans, "a distance of more than fifteen hundred miles." A more direct route was proposed in the report to which we have referred, "to pass through or near the Tombigbee Settlement in the Mississippi territory, and thence to New Orleans."

In 1805, Mr. Jefferson, then President, in a communication to Congress, on the 1st February, called the attention of that body to a route, in progress of survey, by Isaac Briggs, one of the Surveyors

General of the United States, "extending from Washington, by Fredericksburg, Carterville, Lower Sauratown, Salisbury, Franklin C. H. in Georgia, Tuckanbatchee, Fort Stoddart and the mouth of Pearl river to New Orleans." By reference to the letters which accompanied this message, we become assured of the almost incredible difficulties, fatigues and dangers to which the Surveyor General and his party were subjected. Travelling for days through a wilderness unmarked by human footsteps, climbing over precipcies, wandering through swamps, and crossing deep and difficult water courses, sufficiently tested the patriotism of the stout hearts who had engaged in the enterprize. Mr. Briggs says: "I had an idea that I could pass through the country without a path or a guide, but when I mentioned it on the frontiers of Georgia, it was scouted and laughed at, and I am now firmly of opinion that, in this way, it would be at least a *four months* passage from *Georgia* to *New Orleans.*"

In another letter from New Orleans, bearing date 26th November, 1804, we find the following: "On the 29th ult. we left Tombigbee, passing through the town of Mobile; we crossed Pascagoula river, passed round the bays of Biloxi and St. Louis to Pearl river, through the Rigolets and lake to New Orleans. On this part of our route (a distance of about 200 miles) we were 25 days."

The observations he had made, suggested to him the following points, to be established on the mail route; and they were accordingly submitted to Congress by the President. Fredericksburg, Carterville, and Danville in Virginia, Salisbury in North Carolina, Athens in Georgia, Point Comfort, southeastern-most projection of Tallapoosa river (Creek nation), Mobile river, just below the confluence of Alabama and Tombigbee, and New Orleans.

Numerous suggestions have been submitted to Congress, many of which have been taken into consideration and reported upon, by the committees properly charged with all matters of reform in this department of the government. The necessity of an armed guard for the protection of the mails, was once advocated with some warmth, but reported against by Mr. Stokes, the Chairman of the Committee of Post Offices and Postroads, on the 16th February, 1819. In the previous year Mr. Ingham, from the same committee, reported against the expediency of establishing a branch of the general post office in any part of the United States.

In his first report to the Senate, upon the subject of Sunday mails, made on the 19th January, 1829, the Hon. R. M. Johnson uses the following language in reply to the axiom which the petitioners assumed, that the practice was in violation of the law of God: "It would involve a legislative decision in a religious controversy, in which good citizens may honestly differ in opinion without disturbing the peace of society or endangering its liberties."

And, again—"While the mail is transported on Saturday, the Jew and the Sabbatarian may abstain from any agency in carrying it from conscientious scruples. While it is transported on the first day of the week, another class may abstain from the same religious scruples. The obligation of government is the same to both, and the committee can discover no principle, on which the claims of one should be more respected than those of the other, unless it should be admitted that the consciences of the minority are less sacred than those of the majority."

There is probably no intellectual achievement in the career of this distinguished Senator, which has so clearly marked his character and exhibited the great and striking characteristics of his mind. The hypothesis that the "observance of a holyday may be incorporated in our institutions," is successfully met and successfully defeated in its claims to consideration.

In the same year Mr. McKean, in his report to the House of Representatives on the same subject, argued the question more strongly in view of its practical operation. He demonstrated the disadvantages to which merchants would be subjected, and the injuries which would necessarily result to the petitioners themselves, under the operation of the system they sought to establish. The delay of a day in New York, which might frequently occur by the intelligence from England being received there on Saturday night, would start up among us a host of private expresses, which would conduce not more to the pecuniary advantage of their owners than to the detriment and injury of the community generally. While we are frank to admit that we see little difference in the application of the maxim, that "all is fair" to trade as well as to war, we are unwilling to see the government used as a means of enriching one class of the community to the positive exclusion and manifest injury of the others. But this argument, though a valid one at the time these reports were made, have lost much of their force in our day. Neither of these gentlemen had an idea of the chain of lightning, which, by the aid of science, was to encircle the land—the potent messenger of intelligence, unmatched in the celerity of its movements save by THOUGHT itself.

No practical effect can result from a detail of the various laws, by which this department of the government has been controlled, for the last fifty years. The law of March, 1799, differed but in a slight degree from that of February, 1792, of which it was a modification. In both, the postage upon all letters carried a distance of 500 miles and over, were charged at the rate of 25 cts., and newspapers for 100 miles 1 cent, and 1 1-2 for any distance exceeding that. In consequence of the necessity for an increase in the revenue, in aid of the expenses of the war in which the country had been engaged, from February 1st, 1815, to March 31st, 1816, fifty per cent. was added to all postages.

Mr. Platt, the special agent of the government, in the report made to Congress, soon after his return from Europe, recommended, among other things, the "entire abolition of the franking privilege," the establishment of only "two rates of postage for the whole Union," and that "letters should be charged by weight." He asserted that members of Congress employed substitutes to write their names, and that in the session of 1840, 4,314,948 letters were *franked*. In support of his last suggestion, he urged the injustice done to the receiver who does not always open his letters before the Postmaster, and thus single letters are frequently charged as double. A low rate of postage, in offering no inducement to evade the law, gave great employment to the mail service, whose revenues were thereby enlarged. One-half the correspondence between Boston and New York, under the old system, never went by mail.

The Penny Post in England, for which they are indebted to the celebrated Rowland Hill, has been the means of producing much good among all classes, besides yielding a large amount in revenue to the government. The inducement which it offers to the laboring classes to acquire a knowledge of the rudiments of their language, to keep up a communication with their friends, from whom distance may have estranged them, is not the least of the beneficial results it has produced. The German Confederacy are on the point of adopting the system, and we see no reason why republican America should be behind the old States of Europe in so good a work. The fact has been previously stated, that a "money office" has been instituted among some nations attached to the general post office. Why may this not also be the case with us? The advantage of such a regulation presents itself in too strong a light to be entirely disregarded.

In consequence of the charge of full postage on the mail matter conveyed by the U. S. steamer Washington to England, the Postmaster General issued an order on the 5th November, 1847, terminating the arrangements existing between the two countries with regard to trans-Atlantic postage. This order was intended to apply as well to letters conveyed by British and American steam vessels as those in transit through the country. Conformably to this order the express from Kingston and Montreal with packages, letters and specie, for the steamer Britannia, was seized for a violation of the Postoffice and Revenue Laws, though subsequently delivered up. We trust this postal war will not be suffered to continue from any illiberality on the part of the British Government. The protest of Mr. Bancroft, the American Minister in London, to Lord Palmerston, will, we confidently hope, induce a disposition in that government for a postal arrangement, mutually advantageous to both countries.

The increase in the revenues of the Post Office for the quarter ending 31st March, 1847, as compared with the the quarter in 1846, gives the following results in some of the principal cities of the Union:

Baltimore, - - - - -	$3,118	Philadelphia, - - - -	$3,797
Boston, - - - - - -	1,508	Norfolk, - - - - -	636
Cincinnati, - - - - -	1,569	Pittsburg, - - - - -	648
Columbus, Ohio, - - - -	1,375	Savannah, - - - -	714

These facts are sufficient to assure us of the success which has marked the system of low postages. As our population increases, it must be evident there will be a corresponding increase in the number of letters till this branch of the public service is made to defray its expenditures, a point to which it has already very nearly attained.

Length of Post Routes and Cost of Transportation of the Mail in the various States of the Union.

States.	Routes miles.	Total annual cost.	States.	Routes miles.	Total annual cost.
Maine, - - -	3,980	$41,964	Florida, - -	2,958	$45,192
New Hampshire, -	2,267	25,560	Ohio, - - -	11,538	172,295
Vermont, - -	2,486	25,563	Michigan, - -	4,255	38,311

	Routes miles.	Total annual cost.	States.	Routes miles.	Total annual cost.
ısetts,	3,478	$107,393	Indiana,	6,160	$52,439
and,	383	9,187	Illinois,	8,276	102,485
ut,	1,820	45,698	Wisconsin,	3,078	15.043
ɾ,	13,292	292,307	Iowa,	1,631	9,722
:y,	1,980	53,930	Missouri,	7,897	49,720
ınia,	10,227	155,412	Kentucky,	7,705	89,581
,	549	7,862	Tennessee,	6,828	55,298
,	2.359	133,751	Alabama.	6,553	136,495
	10.782	192.615	Mississippi,	4,117	58,451
na,	7,423	172,520	Arkansas,	4,637	39,966
ıa,	4,718	118,157	Touisiana,	3,208	41,795
.	5,761	153,001	Texas,	2,766	24.102

tal, - - - - - - - 153,808 1,406,818
ıcies on railroads, steamboats, &c, - - - 46,158

tal, - - - - - - - - - $2,453,001

.bove table is abstracted from sundry documents attached to rt of the Postmaster General. The duties of this officer bring e immediately before the people, and his conduct is thereby l to the closest scrutiny. To expect that he would be enabled ;t such arrangements in the general administration of his office e satisfaction to all, would be demanding at his hands what ıl has, or ever will be able to achieve. Of all our public func- he most needs the calm teachings of philosophy to encourage ain him.

o be regretted that no uniform system of charges upon letters ıteamships to Europe has been adopted by the several lines.)llowing shows the rates of the different lines:

American Line.—Steamship Washington.

letter and package not exceeding 1-2 ounce,	21 cents.
and not exceeding 1 ounce,	48 "
additional 1-2 ounce or fraction,	15 "
ıewspaper, pamphlet or price current,	3 "

ıatter to Bremen, either for delivery or distribution, may be sent either ithout the postage being previously paid.

British Line.—Steamship Sarah Sands.

letter weighing 1-2 ounce or less,	25 cents.
ɟitional 1-2 ounce,	25 "

Line.—Steamships Union, Philadelphia, New York and Missouri, &c.

be borne in mind that the rates by the French line refer to letters weigh- ɔne quarter of an ounce. The postage to cross the Atlantic cannot be

ıt the New York Post Office,	1 cent.
ɔ cross the Atlantic,	20 "
rom Havre to Paris,	10 "
	31 cts.

Postage of a letter from New York to England via Havre.

ıt the New York Post Office,	1 cent.
o cross the Atlantic,	20 "
rom Havre to English shore,	2 "
axation from the shore to the letter's destination,	10 "
	33 "

Packet Ships for Liverpool, London and Havre.

On each letter weighing 1-2 ounce, - - - - - - - -	12 1-2 cts.
Newspapers, - - - - - - - - - - - - - - -	2 "

In all cases, whether by steamer or sailing vessel, the inland postage to New York or Boston, requires to be pre-paid.

The discovery of how much weight can be transmitted by the mail for five cents, has been made by the *Philadelphia Sun*, and involves some nice calculation. We can readily credit the assertion that great pains were expended in the effort, and give the result entire:

The Ounce Letter.—An avoirdupois half ounce is 218 3-4 grains; wafers one grain; sealing wax, usual quantity, five grains; one sheet of foolscap weighs 172 grains; letter paper, 135; small envelopes 42 grains—large 52. You can send a letter 300 miles for five cents, containing, viz: the sheet of paper with three bank notes, sealed with wax; or the letter with three bank notes in an envelope. Half a sheet of letter paper with a half eagle enclosed under wax. A sheet with a dime and a half enclosed secured by wafers. A single sheet of letter paper with a quarter eagle enclosed, secured by wax. A sheet of foolscap in an envelope, sealed with a wafer. One and a half sheets of letter paper, secured by wax or wafer. These calculations are based upon the ordinary letter paper now in use. By using very thin French paper, a greater number of sheets go to the half ounce, of course.

The report of the Postmaster General to the present Congress, embodies much interesting matter connected with the administration of the department, for the past year. It makes no pretensions to rhetorical effort or literary display. The style is easy, forcible and perspicuous.

The routes are said to have been extended 9,878 miles since the 1st July, 1847, and the transportation in the same time 3,253,630 miles. The following statement exhibits the extent of the annual transportation of the mails, and the cost of the same:

	Miles.	At a cost of
On railroads, - - - - - - -	4,170,403	$597,475
On steamboats, - - - - - - -	3,914,519	245,744
In coaches, - - - - - - -	15,209,005	912,462
By other modes, of inferior grade, - - -	15,593,972	650,166
		$2,406,848

The number of Post Offices in the United States on the 1st July last, was 15,146, an increase of 963 on the previous year. There were discontinued during the same period 284. The best estimate of the number of letters and papers passing through the United States mail for the last year, is as follows:

Paid and unpaid, single rates of 5 cents, - - - - - -	36,152,566
do. do. 10 cents, - - - - - - -	12,851,532
Ship and steamboat letters, at 6 cents, - - - - - -	427,800
Ship and steamboat letters forwarded in the mails from foreign countries, 2 cents added to the regular postage, - - - - - -	850,960
Dropped letters, - - - - - - - - - - - - -	865,308
Printed Circular letters, - - - - - - - - - -	1,025,304
	52,173,480

The number of letters sent through the mail to the army in Mexico and by those entitled to the "franking privilege," is placed at 5,000,000. *Of other matter* there are computed to be—of newspapers 55,000,000, *pamphlets and magazines* 200,000.

An amount equal to about $135,000 is annually lost to the government by the number of dead letters returned to the department. For the last year they amounted to 1,800,000.

The expenditures of the present year will exceed that of the last by $228,333, from which sum the savings made in the contracts for the Southern section, amounting to $108,697, must be deducted. The estimated means and expenditures of the department for the year, show a surplus of $213,951. This is another of the gratifying features which has marked the system of cheap postage in our country.

A good part of the report is occupied with a statement of the difficulties which have arisen between the department and ths Fredericksburg and Richmond Companies, touching the compensation allowed for the transportation of the mail over these routes. We cannot conceive how a diversity of opinion upon the course pursued by the Postmaster General in this particular, can be honestly entertained. The arguments he adduces in support of his position, are conclusive to our mind, and carry with them the weight of sober conviction.

We have thus sketched, imperfectly enough, it must be admitted, the leading facts in the history of this system. We have seen it in many of its phases and under the operation of different laws. But, we venture to affirm that in no age has its strides been more rapid or its achievements more grand than in our own. But a few years since, and animal power was made to yield to one of the greatest inventions which has distinguished any time. The magic power of steam supplanted all other means of conveyance to be itself subdued by the lightning swiftness of the telegraph. The philosopher of an age lost in the dim distance of antiquity, if replaced upon the earth, would fail to discern in our times the features that so distinctly marked his own. The learning of the schools could no longer impose upon his quickened faculties or delude his stronger judgment. The magic word "EUREKA," which so long hung trembingly upon his lips when some half conceived creation of mind broke dimly through the cloud suspended over his faculties, and as rapidly retired, has found in some modern sage the boldness to give it utterance. Discovery has so rapidly succeeded discovery, that imagination is mute in dwelling on the wonders of reality, and the precepts of philosophy are lost in the energy of ACTION.

AMERICAN AND FOREIGN TRADE AND STATISTICS.

COMMERCIAL EMBARRASSMENTS IN ENGLAND — WEST INDIA BANKS — COTTON TRADE — EXPORTS COTTON FROM EAST INDIES — FROM PORT OF CALCUTTA — PORT OF MADRAS — EAST INDIA COMPANY'S EXPORTS TO CHINA — PROSPECTS AMERICAN COTTON — ESTIMATED SUPPLY AND DEMAND — BANKS IN UNITED STATES — TRADE OF NEW ORLEANS — NOTE.

The revulsion in English commerce was made the subject, under this head, for a few remarks in our last number. The "accounts" which have reached us since that time, are of a most encouraging aspect, so far as our conception of their character extends, though we are still left to the uncertainties of speculation for the results which are to be developed. The three great causes to which we are to attribute the difficulties and disasters which have swept over the British nation, have been too frequently stated to require a repetition in this place. That the *panic* has in a great measure, if it has not entirely, expended its force, we religiously believe. The condition of the Bank of England, holding, as she does, over £11,000,000 in bullion, and a reserve of notes amounting to £6,500,000, sufficiently fortifies her against a reduction of interest much greater than that which has taken place. As we have before remarked, we are not of those who repose entire confidence in the Bank of England as competent at all times to arrest the difficulties which result from a diversion of capital, or of restoring the equilibrium, when the harmonious action of trade has been disturbed. That her power and resources may be so administered as to result in good or evil, cannot be fairly questioned. Such being the position of affairs, it will not fail to strike the most careless observer, that the Bank and the community must frequently be placed in antagonistic relations. And this is more emphatically true upon the approach of any great commercial crisis.

The currency of England is more largely metal than our own, though the surface of country over which it is distributed with us, would seem to require the larger amount. In France, where there is but one Bank, located at Paris, the necessity of a large specie circulation is absolutely required by the wants of the people. Hence we find the metallic circulation is equivalent to $306,000,000, nearly all silver, an amount about double that of England, and probably three times greater than our own. A member of the French Chamber of Deputies estimated the circulation of England at 30,000,000 sovereigns. The relative position maintained by the Bank of England to the commercial interests of the community, so far as the currency is concerned, may be thus clearly seen.

In former periods, when the amount of bullion held by the Bank reached £11,000,000, the loss of interest upon so large an amount was urged as a very serious objection. May we not, then, ask with some propriety, of what possible use is so large an amount of coin held by the bank at the present time? A satisfactory reply to this question is somewhat difficult. The argument furnished to our mind by the fact is of the most encouraging character, particularly in view of what we shall seek to make apparent before we close, touching the "*convertibility*" of Bank notes. This idea of "*convertibility*" occupies so prominent a place in all the measures devised by the Ministers for the regulation of the affairs of the Bank, as to lead them entirely to disregard the lessons of experience and the plainest principles of practical wisdom. That panics are produced by this very theory is a remark so often repeated and so familiar to us all as to have passed into an aphorism. During the most exciting period in the history of the present crisis, the bullion in the Bank of England was £8,000,000, and at no time do we believe was it reduced much below this sum. The opinion is very generally entertained that the idea of convertibility, one of the leading principles of Sir Robert Peel's Bank bill of 1829, will be retained, regardless of any modifications to which the act of 1844 may be subjected by the present Parliament. The effect of this, we conceive, will be to keep in the vaults of the Bank an unnecessary amount of bullion during a period of comparative ease in the money market, to be withdrawn as soon as the indications manifest themselves of the slightest depreciation of paper issues. A doubt can scarcely exist in the mind of a reflecting man that occasions may, and do arise, when the balance of trade should be discharged in coin. The large importation of grain into England during the past year may furnish such an example. But who will be found bold enough to affirm that any law could so far have controlled the currency as to have kept the coin within the kingdom. It may be freely confessed that, when the exchanges are undisturbed and regularly perform the functions assigned to them, the necessity for a payment in coin of any balance due from one country to another is never absolute. Coin is only necessary to restore the equilibrium in the trade of nations. It is not disputed that coin is a commodity, subject to the same operating causes which affect other products. A tyro in political economy is familiar with this principle. What then is commerce? We may answer, by defining it as an exchange between nations of equivalent products or commodities. If, then, these propositions are not disputed, and we presume we have stated them with sufficient clearness for all practical purposes, does it not follow that coin will only be exported so long as it is cheaper than other commodities, and no longer, and that a disturbance in trade must be both unusual and unnatural to call for payments in gold and silver. When this is the case, however, it is beyond the power of any institution, despite its enactments to preserve the principle of convertibility, to retain specie in its vaults. The United States is almost the only country where the imports have for any length of time been in excess of exports. Apply the principle then otherwise than as it has been stated above, and we would be poorer now, with all our vast population and resources, than during the revolution.

From the fact that coin has been crossing the Atlantic in both directions, we must infer a want of confidence, for surely a derangemont in the exchanges would not manifest itself in that way.

We assumed the position in our last, that there was a derangement of CREDIT in Great Britain to an alarming extent, but the currency in the country was fully competent to all the purposes for which it is designed. The abstraction of an amount equal to £5,000,000 from the circulating medium of the kingdom, would be impotent in producing the calamities we have witnessed, were it not for the absence of credit. Indeed, we very much doubt whether even that amount has been withdrawn from the circulation. Destroy the system of credit upon which the commercial greatness of England is based, and what would become of her trade. You may sink in the blue depth of the ocean every dollar which forms the circulating medium of the realm, and but a few years would elapse ere you would see her smiling in plenty, with scarcely a thought of the past. Such is the difference between credit and currency.

In view, then, of all the circumstances, we are compelled to acquit the Bank of England of any decided agency in producing the embarrassment in the commercial affairs of England.

From our observation upon passing events in Great Britain during the last few months, we are too much disposed to regard this nation as bankrupt in purse and crippled in resources. She is neither the one nor the other. A portion of her capital, it is true, has become fixed in railroads, and her importation of grain, to supply the deficiency in her crops, has created a further demand upon that capital. But does it follow from this, that she is a ruined country? Does a man become bankrupt when, with a capital of several thousands, he exceeds for a single year his income by a few hundreds? Or, is an inability to pay in current coin, upon demand, an evidence of insolvency in one whose assets exceeds by thousands the liability he has incurred in tens? Assuredly not. And yet, what is true of an individual, is equally true of a nation.

In a debate in the House of Commons, Lord George Bentinck denied that the expenditures in railways had produced the difficulties which had been attributed to them. He rediculed the idea that an annual expenditure of £12,500,000 should have reduced the country *to the verge* of ruin, aud furnishes the example of England, who, during the war with France, was enabled to spend for seven years an average of £26,000,000 yearly. From this he argues that free imports have been the immediate cause of all the sins which have been visited upon the railroads. How cheap food can draw the gold out of the country and produce such astounding results, we are at a loss to conceive. Nor are we at all enlightened by the remarks which have been made by the noble Lord, in support of his position. We cannot forbear quoting in this place from Lord John Russel:—"Unfortunately, sir, whether you have protection or free trade in this country—make your laws at your will—regulate your currency as you please—it happens that this country, when it rises to a state of great prosperity, rushes on precepitately to build a system of artificial and fictitious credit, which is sure at some moment or other to bring down depression and a revulsion of that prosperity." In the increased exports of British manufactured goods from Liverpool to the United States, amounting to £2,261,000, for 1847, over the previous year, Lord John Russel in reply to Lord George Bentinck, draws the most favorable inferences. We quote his language:—"This shows that according to the wholesome operations of trade and exchange, the food which we have brought to this country in greater quantities than usual, has been the cause of greater exports of our manufactures. It is to that export of manufactures—to the return of gold which we have sent abroad—to the state of the exchanges, and to several other circumstances of favorable augury that I look, not for the immediate restoration of prosperity, but for the gradual restoration of a better state of things, and from that to our wonted and former prosperity."

We foretold in our last, the necessity for a reduction in the rate of interest, and are at this time but poorly persuaded by the arguments adduced by Lord John Russell, high as is the authority of his name, by which he maintains the contrary.

The revolution in public opinion, by which the abrogations of the Corn Laws was affected, seems to have settled down into a state of quiescence, if we are to judge from the disposition which is apparent to bring the sliding scale into operation again. The establishment of equal representation and other measures of reform, imparatively called for by the condition of the operatives, must consequently prove as delusive as the hopes indulged, have been fleeting and evanescent.

In the condition of the West India Bank, we believe there is no cause for serious alarm to to the people of England. To the shareholders it may cause slight loss, but the disposition which prevails among the merchants of Antigua to receive the notes of that branch in payment of purchases and claims, gives evidence of a confidence which is encouraging. The Antigua Observer, in some brief remarks upon the condition of the West India Banks uses the following language:—"The West India Bank is more confined in its operations, having only branches in eight of the Windward and Leeward Islands—Barbadoes, Trinidad, Tobago, Grenada, St. Vincent, Antigua, Nevis, and St. Kitts—and, therefore, requires less capital—it having paid up some 500,000 or 600,000 dollars, with a further liability on the part of the shareholders, additionally, of three times that amount, say in round numbers 2,250,000 dollars. Now it concerns the public to know that before any depositor in either of these banks, or holders of their notes or other liabilities, can lose a farthing, the Colonial Bank must lose £2,000,000 sterling, and the West India 2,250,000 dollars, which are results that may fairly be considered morally impossible.

Of unhappy Ireland we have not the heart to speak. It is enough to know that 115,929 persons died for want of food during the late famine, to enlist all the t sympathies of our nation in her behalf. She "possesses all the terrific sty of Prometheus *chained* and the pitiable wretchedness of Philoctetes,"

so much has been said of the large amount of specie shipped from England ıg the past year, in payment of the heavy demands held against her by this try, for her importations of grain, we would barely remark, that of plain ırinted colicoes alone, imported into the United States for the first half year 17, there was an increase of 32,500,000 yards, equal to fully 250 per cent.

ESTIMATED RENTAL, AND VALUE PROPERTY IN ENGLAND.

	Rental.	Value Property.		Rental.	Value Property.
....	£51,898,423	£1,200,000,000	1847....	£65,000,000	£2,400,000,000

es this exhibit the evidences of bankruptcy, ruin and decay. We have at greater length upon this subject than was our intention, in view of the sition, which too generally prevails, to argue from the unsettled condition of sh affairs, a revulsion in our own country. We have failed to discover the est analogy in the cases, unless it is to be found in the almost unexampled erity which, during the last year, has diffused itself throughout the length readth of the land. Such was the condition of England immediately preced- e crisis. But prosperity was not the cause of embarrassing her commerce so reducing many of her merchants to bankruptcy and ruin. It was the *result st prosperity*, felt in the eagerness to enlarge the sphere of action and extend ominion of trade. Let us then avoid the rock upon which she has split, if ould not entail upon ourselves the consequences which have resulted so ılly to her.

EXPORTS OF COTTON FROM EAST INDIES.

e following tables exhibit the whole amount of Cotton exported from the h East Indies, to every part of the world, from 1795 to 1845. They are taken he returns made to an order of the House of Commons, dated 15th February by James C. Melvill, of the East India House, England. We beg to tender :knowledgmens to Mr. Simmonds, of the Colonial Magazine, London, for iginal documents.

FROM THE PORT OF CALCUTTA.*

Maunds,†	Rupees.‡	Years.	Maunds.	Rupees.	Years.	Maunds.	Rupees.
8,895	1,47,211	1812-13	20,847	2,68,844	1829-30	3,491	34,906
8,758	1,35,870	1813-14	2,99,193	39,92,036	1830-31	69,098	5,79,711
10,247	1,07,711	1814-15	3,73,134	45,60,863	1831-32	52,765	4,45,786
46,294	4,27,053	1815-16	3,26,558	38,21,475	1832-33	7,631	64,511
6,387	90,817	1816-17	6,65,236	76,89,268	1833-34	2,340	28,325
1,389	25,935	1817-18	10,03,363	1,10,13,074	1834-35	3,52,022	31,26,970
810	15,160	1818-19	8,37,759	89,76,861	1835-36	7,03,178	59,28,471
38,843	6,19,017	1819-20	2,37,435	28,33,773	1836-37	4,45,667	38,86,181
1,84,717	23,13,185	1820-21	2,78,319	44,40,881	1837-38	2,00,119	18,13,484
1,44,844	19,07,507	1821-22	2,39,131	34,24,311	1838-39	2,18,631	22,13,578
2,26,383	31,44,544	1822-23	95,244	12,44,980	1839-40	1,80,558	18,33,762
1,34,912	19,26,902	1823-24	1,58,889	23,47,568	1840-41	1,83,621	19,86,505
1,79,796	26,07,805	1824-25	2,51,205	32,28,335	1841-42	1,12,576	12,00,893
1,91,804	28,08,639	1825-26	2,36,141	30,57,130	1842-43	1,72,702	17,31,295
2,81,866	39,35,461	1826-27	3,65,639	41,60,534	1843-44	2,01,497	20,25,535
1,21,852	15,02,946	1827-28	2,16,084	32,62,862	1844-45	2,01,873	20,18,736
1,18,175	15,91,681	1828-29	2,01,083	25,68,423			

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e Exports are to England, France, Coromandel, Malabar, Sumatra, Arabian and Persian Penang, China, Mauritius, Sweden, Hamburg, New South Wales, Gibraltar and Malta, Copenhagen, Lisbon, Brazil, America—none since 1819-20, Manilla, Holland, South Ameri- ıka, Cape of Good Hope, Russia, Batavia, Muscat, &c. Neither for Calcutta, Madras, or y, are the East India Company's shipments returned.

Maund in Calcutta is the same as in Bengal, viz:

Bengal Factory Maund 74 lbs. 10 oz. 10 dr.
" Bazaar " 82 " 02 " 02 "

ıcca Rupee of Calcutta, the Currency in which the East India Co. keep their accounts, ıch bears a premium of 16 per cent over the Current Rupee, is of the value of 2s 1d 6-25

The returns give the East India Company's shipments from the same qu
for certain, of the above years only. Why they are not given for other yea
cannot ascertain. We give them below.

1816–17	Lbs.	1,002,600	1831–32	Mds.	
1829–30	Mds.	7,415	1832–33	"	
1830–31	"	3,203	1833–34	"	1

FROM THE PORT OF MADRAS.

Years.	Cwt.	Rupees.*	Years.	Cwt.	R
1824-25	44,287	10,86,460	1834-35	91,595	1
1825-26	59,030	11,89,894	1835-36	2,61,395	4
1826-27	40,410	7,16,684	1836-37	3,11,043	5
1827-28	37,376	7,10,819	1837-38	64,686	9
1828-29	56,737	11,02,161	1838-39	1,71,568	3
1829-30	64,533	12,34,303	1839-40	2,13,235	3
1830-31	38,916	7,72,001	1840-41	2,44,832	4
1831-32	42,976	8,63,387	1841-42	1,14,946	6
1832-33	39,906	6,83,373	1842-43	4,10,116	6
1833-34	25,982	4,53,116	1843-44	3,41,900	5

FROM BOMBAY.

Years.	Rupees.†	Years.	Rupees.	Years.	Lbs.	R
1801-02	39,68,180	1816-17	57,51,668	1831-32	. . . . . .	8
1802-03	53,25,407	1817-18	99,18,397	1832-33	. . . . . .	1,2
1803-04	42,68,685	1818-19	1,26,63,140	1833-34	. . . . . .	1,4
1804-05	80,44,726	1819-20	47,11,377	1834-35	. . . . . .	1,1
1805-06	75,04,113	1820-21	52,89,118	1835-36	. . . . . .	1,9
1806-07	. . . .	1821-22	47,49,319	1836-37	11,54,88,368	1,7
1807-08	90,25,238	1822-23	57,91,103	1837-38	9,74,21,153	1,3
1808-09	51,71,923	1823-24	61,92,873	1838-39	10,14,80,687	1,4
1809-10	54,17,850	1824-25	92,74,275	1839-40	9,33,17,786	1,4
1810-11	49,65,921	1825-26	1,19,90,353	1840-41	13,17,15,166	1,1
1811-12	35,22,337	1826-27	87,11,667	1841-42	16,10,26,110	2,1
1812-13	23,30,896	1827-28	1,03,28,838	1842-43	15,17,80,130	1,8
1813-14	26,14,724	1828-29	99,63,825	1843-44	17,13,67,742	2,1
1814-15	36,38,068	1829-30	88,77,129	1844-45	12,29,76,131	1,3
1815-16	53,64,959	1830-31	90,25,435	1845-46	10,90,06,628	1,1

The returns of the East India Co's exports from Bombay are given for t
lowing years: 1816–17, 26,626 rupees; 1818–19, 29,533 rupees; 1819–20, 6,
rupees; 1820–21, 2,56,216 rupees; 1821–22, 9,946 rupees; 1830–31, 21,076 r

EAST INDIA CO'S EXPORTS TO CHINA.

	From Madras.		From Bombay.		From Ben	
Years.	Bales.	Weight, Candies.‡	Bales.	Candies.§	Bales.	
1822-23	6,171	3,702	6,556	3,136	8,000	
1823-24	7,742	4,645	16,230	7,462	25,168	1
1824-25	11,201	6,719	12,519	5,864	20,769	
1825-26	7,338	4,402	13,507	6,444	19,969	
1826-27	8,763	5,256	15,065	7,148	32,145	
1827-28	12,029	7,217	22,486	10,680	22,694	
1828-29	12,856	7,714	16,404	7,775	43,114	
1829-30	13,500	8,100	15,042	7,080	21,174	
1830-31	9,485	5,691	23,072	11,095	26,959	
1831-32	. . .	. . .	18,156	8,610	18,390	
1832-33	. . .	. . .	19,051	not stated	21,732	no

From what cause we know not, but the returns are brought no low
would have been gratifying could we have given them to date.

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* A Madras Rupee is of the value of 1s 11d at the English Mint.

† A Bombay Rupee is calculated by the East India Co. at 2s 3d.

‡ A Madras Candy is 20 Maunds or 500 lbs. Avoirdupois.

§ A Bombay Candy is also 20 Maunds or 560 lbs. Avoirdupois.

ports of cotton twist and yarn and cotton cloths from
have increased astonishingly within the past few years, r
the operation of the tariff law established by the Briti
The total amount imported in 1846 exceeds that of the y
rupees, equivalent to about $5,813,666, computing the rup
fractions.

en a source of regret to us that we have been unable to g
admirable paper read before the "British Association" on
he Cotton Trade," by Professor ROYLE. It devotes itself, from the
e have seen, more specifically to India Cotton. In the Northeast In-
iments have failed from the excessive dryness of the seasons, but with
irrigation, it is thought the neighborhood of the Ganges and the Jumna,
mates of Egypt similar to these, the plant may be cultivated success-
mething has been achieved in the *Peninsula of India*, and the culture
largely extended by the advance of a farthing per pound in the local
this is esteemed a sufficient inducement for the "ryats" or farmers, to
re extensively in its growth. The expense of transportation, however,
at, and we have been furnished with the example of 34 bales shipped
District to Liverpool, at a cost of 3 1-2*d*. Originally valued at 6 3-4*d*.
it will be seen how little was left to the growers. It is said that com-
ss has been attained in the culture of cotton in the Southern Mahratta
nd particularly near the Dharwar, under the supervision of Mr.
e American planter. The natives have extended the cultivation, in-
he experiments of government and the better prices which have been
weavers. They are said to have brought 30,000 acres under cultiva-
ear, and by the aid of the improved gin, to have succeeded so far in
he cotton, as to enhance its value greatly in the Liverpool market.
te is like that of South Carolina — the land well adapted to the culture,
g seems required to make it a large cotton producing country, but a
mand. The advantages possessed by the India cotton are its color, the
with which it takes color in dyeing, and its great swelling in the pro-
aching. From its being grown in a very dry climate we may infer the
alities. The *dirty condition of India cotton* is one of the serious disad-
ith which it has to contend, but not exclusively to the carelessness of
tor is this to be imputed. The *Wahkary* (or middle man) urged by
t of gain *in the weight* loses sight of the *condition*, as forming a part of
nd thus adulterates it with inferior cotton, seed, fine sand, &c

ice of American and India or Surat Cotton in Liverpool, and average Exports from India.

n.	pence.	India.	Exports India.	bales.
21, - - - -	15 3-4a24	13 1-2a18	1820 to 1825, - - -	39,567
41, - - - -	6 3-8a 8 3-4	3 1-2a6 3-4	1839 to 1844, - - -	233,438
45, - - - -	4 1-2	2 1-4a3	1846, - - -	185,119

is presumed, the growth will be considerably augmented.

tained, in view of these facts, that, with the investment of capital and
tion to the cleaning of cotton for market, the cultivators in India, as
e more skill in the conduction of planting, will be enabled to contest
of the United States in the markets of Europe.

lightly we may be disposed to regard these indications of the growth
India, we cannot fail to observe the very serious attention which it

receives from the English nation. In an extract from the "Manchester E: iner," the fact is presented to us that cotton of a very superior quality grown *New Orleans seed*, was in course of shipment to that place by the East India pany from Cochin. Two samples of cotton grown in Coimbatore unde superintendence of Dr. Wright, have been received already, of a very long and a beautiful white color. One of the samples was slightly injured damping, "the damp weather preventing the pods from opening at the season."

The prospect of American cotton, at the present time, will scarcely justi prediction made in December last, that "the demand will greatly excee supply." The following table, copiled from "Burn's Commercial Glanc hibits the number of bales imported, exported, taken for consumption, ar stocks from 1832 to 1847.

Years.	Imported.	Exported.	Consumpt'n.	Stock in London.	Stock in Liverpool.	Stock in Glasgow.	To
1832, . . .	902,245	65,100	858,434	37,381	212,350	26.575	2
1833, . . .	931,796	79,066	877,589	34,102	197,960	13.058	
1834, . . .	946,585	90,895	883,280	35,243	180,780	9,127	
1835, . . .	1,089,309	107,240	937,616	26,296	145.311	13,953	1
1836, . . .	1,191,744	100,853	1,031,904	24,470	184,700	20,843	
1837, . . .	1,163,839	128,535	1,064,931	60,820	204,590	23,500	
1838, . . .	1,429,062	102,370	1,265,116	64,150	170,853	24,370	
1839, . . .	1,109,550	121,659	1,043,511	46,450	248,349	26.300	
1840, . . .	1,599,353	126,045	1,274,729	31,640	206,049	27,790	
1841, . . .	1,341,659	117,330	1,118,717	50,660	366,140	27,248	
1842, . . .	1,384,894	141,457	1,221.693	68,240	429,830	40,190	
1843, . . .	1,556,962	121,410	1,357,662	74,570	456,600	30,234	
1844, . . .	1,479,331	134,882	1,427,482	84,160	653,900	46,692	
1845, . . .	1,855,660	120,595	1,577,617	91,775	740,580	61,627	
1846, . . .	1,243,706	194,246	1,561,232	90,060	885,480	84,990	1,
1847, . . .	. . . . . .	. . . . . .	. . . . . .	67,985	438,970	41,703	

The consumption of cotton from 1832 to 1847 is here shown to have doubled, while the stock from 1st Jan., 1846, to the same period in 1847, wa ced 411,772 bales, leaving on hand 548,658 bales, to form a portion of the 1847–48. It must be remembered that this is not exclusively American The stocks have been gradually augmenting from 1832, if we except tl 1835, though the amount imported had rather more than maintained its average increase. We find the amount of cotton wool exported by Eng 1846, greatly exceeds its usual proportion, as compared with previous while the consumption of 1845 and '46 is, with a trifling variation in t the former year, very nearly equal. The prices of cotton in Liverpool, as the table below, will be found to have been on the advance, with a very exception, from January 1846 to January 1847.

January	10,	3[illegible]a4[illegible]	March	21,	3[illegible]a4[illegible]	May	30,	3[illegible]a5[illegible]	August	8,	4 a5[illegible]	October	
"	17,	3[illegible]a5	"	28,	3[illegible]a4[illegible]	June	6,	3[illegible]a6	"	15,	4 a5[illegible]	"	
"	24,	3[illegible]a4[illegible]	April	4,	3[illegible]a4[illegible]	"	13,	3[illegible]a5[illegible]	"	22,	3[illegible]a6	"	
"	31,	3[illegible]a4[illegible]	"	11,	3[illegible]a5[illegible]	"	20,	4 a5[illegible]	"	29,	3[illegible]a5[illegible]	Nov'ber	
February	7,	3[illegible]a4[illegible]	"	18,	3[illegible]a5[illegible]	"	27,	3[illegible]a5[illegible]	Sept.	5,	3[illegible]a5[illegible]	"	
"	14,	3[illegible]a4[illegible]	"	25,	3[illegible]a4[illegible]	July	4,	3[illegible]a5[illegible]	"	12,	4 a5[illegible]	"	
"	21,	3[illegible]a4[illegible]	May	2,	3[illegible]a5	"	11,	3[illegible]a5[illegible]	"	19,	4[illegible]a5[illegible]	"	
"	28,	3[illegible]a4[illegible]	"	9,	3[illegible]a5	"	18,	3[illegible]a5	"	26,	4[illegible]a5[illegible]	Dec'ber	
March	7,	3[illegible]a4[illegible]	"	16,	3[illegible]a5	"	25,	3[illegible]a5[illegible]	Oct.	3,	4[illegible]a5[illegible]	"	
"	14,	3[illegible]a4[illegible]	"	23,	4 a5[illegible]	August	1,	4 a5[illegible]	"	10,	4[illegible]a6	"	

It cannot be urged that the short crop of 1846–7, was the sole and imı cause of the advance in prices thus made apparent. It must be remember England was in the enjoyment of almost unexampled prosperity, with mo ital at her disposal than the demands of commerce seemed to require. Hence we find that, from the 10th January to 28th February, the amount taken by the trade never fell below 25,000 bales per week, though in the first week of February it reached 38,580 bales. The quantity taken by speculators during that time, averaged 6,187 bales. From 7th March to 25th April, the average of 24,362 bales were taken by the trade, and by speculators, 4,675 bales. In the last week of this period, the quantity imported was 100,727 bales double the quantity imported in any other week during the year. From 2d May to 27th June, comprising nine weeks, the quantity taken by the trade had increased by little over 2,000 bales in the average weekly amount, and that by speculators averaged 5,900 bales, though in the third week comprised in this period, 22,000 bales were taken, and in the last week but 500. From July 4th to 29th August, comprising also a period of nine weeks, the average of the trade was 28,688 bales per week, and that taken by speculators fell to 3,605 bales weekly. From September 5th to 31st October, the trade appear to have extended their purchases, which averaged 31,971 bales weekly, induced, probably, by the more reliable and authentic accounts from this quarter, of the shortness of the crop and the speculative movement which appears to have manifested itself about this time. During this period, the average quantity weekly taken on speculation was 26,810 bales. We now come down to the last period embraced in the eight weeks, from November 7th to December 26th, a period in which the speculation of which we have already seen the manifestations, was found to enlarge and extend itself. The average of the weekly trade was but 2,462, and the speculative demand 31,484 bales. So unequal, however, was the demand that, for three weeks immediately preceding the last, the average weekly amount taken by speculators was 69,266 bales. It may be well to state here that the causes which operated so powerfully against cotton the past year, make its influence of too uncertain a character to be used as a criterion in our present speculations.

Upon examination, we find that from 1st January to 17th December 1847, as compared with the previous year, the decrease of American cotton in England, has been in

	Imports.	*Exports.*	*Consumption.*	*Stock.*
	Bales.	Bales.	Bales.	Bales.
	87,297	29,983	393,020	25,360

Let us see, now, if any results favorable to this great staple can be deduced from the facts which have been enunciated. With a stock of 1,060,460 bales on the 1st January, 1846, we have witnessed an almost gradual advance in price to the same period in 1847, and a reduction in the stock to 548,658 bales. It is true, the stock of manufactured goods was considered large, but that objection has no existence now. The course pursued by the manufacturers has assisted greatly in its reduction.

We have, then, for the crop of 1847-8, taking the estimates most generally

admitted, - - - - - - - - - - - -	2,200,000	bales.
Receipts in Great Britain from India, - - - - - -	200,000	"
" " " " Brazil, Egypt, &c., - - -	200,000	"
Stock of 1846, less the decrease, to 17th December,* - - - -	520,000	"
Total supply, - - - - - - Bales, - - - -	3,120,000	

In the estimate of the crop coming to market, we have no idea we have placed the figures at a point below what the result will establish. In the receipt of Brazil and Egyptian cotton in Great Britain we incline strongly to the impression that the imports from these two points will not exceed our estimate. The fact of large quantities of Egyptian cotton having been diverted from the English to the French market, can have no bearing upon the question in hand. Nor do we conceive ourselves far wrong in fixing the receipts of Great Britain from India at 200,000 bales. Allowing that an increase will take place, we very much doubt whether it will overrun the 15,000 bales we have granted in excess of 1846.

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* The stocks in France and on the Continent are not included in this estimate, as calculated to *exercise but an unimportant* influence on the general result.

We will now see how stands the other side of the account. And here we discover how far from perfect is the information upon which we must rely to assist us in our investigations. But we hazard the figures.

Demand of Great Britain,	1,600,000
" of France,	320,000
" of United States,	480,000
Exports from United States to Cuba, Triste, Hanse Towns, &c., and from Great Britain to other parts,	420,000
Total demand,	2,820,000

Thus, on the appearance of the crop of 1848-'49, there will be but 300,000 bales remaining over, the stock of the present year. Let us now seek to analyze the estimates we have made of the demand. It is but reasonable to believe that the consumption of Great Britain, the present year, will at least equal that of 1846. We say, but reasonable, in view of the low price of cotton, the reduction in the stocks of manufactured goods and the healthful tone which is manifesting itself in the English money market. Added to this there appears a better feeling in the manufacturing districts, excited by some of the causes we have enumerated, combined with the low rate of interest. Of the wants of the United States, it must not be forgotten that the consumption of the last year's crop was about 428,000, exclusive of what was manufactured south and west of Virginia. We can hardly suppose then that this estimate is too large. Of the remaining exports, we remark for the satisfaction of those who may be disposed to regard the amount as exaggerated, that according to the returns of the Secretary of the Treasury for 1846, computing the bale at 500 lbs. weight, there was exported to ports, other than Great Britain and France 337,678 bales. The hypothesis that any reduction of the stock in Great Britain, at any time during the year, would be followed by an immediate advance in prices, is not without its claims to our consideration. The system of short time, adopted by the manufacturers as the infallible preventative of high prices, does not well comport with an opposite state of things, hence we find a very different feeling prevails during low prices.

This point, we think, we have established, that on the 1st January, 1849, the stock of cotton will be greatly reduced, and that upon present rates *there must be an advance.*

In a review of the New Orleans Price Current we discover a decrease in the receipts of cotton at all the ports of 75,005 bales, as compared with last year, a marked falling off being evident in the receipts at Savannah and Charleston, in the one place of 79,371 bales and in the other of 111,935 bales. The increase in New Orleans, so far, has been something over 100,000 bales, and in Mobile 26,302 bales.

The following statements of the banks of the United States is taken from a full and extended supplement attached to that invaluable work, the Bankers' Magazine for January, 1847:

BANKS OF UNITED STATES.

es.	Population. 1840.	No. of Banks.	Capital.	Circulation.	Specie.
rk, Country,	2,429,000	144	19,356,000	19,270'000	2,533,000
rk City,		25	24,003,000	6,967,000	6,574,000
tts, Country,	738,000	83	13,249,000	10,988,000	658,000
City,		26	18,863,000	7,208,000	3,286,000
ania, C'ntry,	1,724,000	31	7,866,000	6,400,000	1,800,000
phia,		14	9,222,000	4,200,000	3,900,000
a,	353,000	6	17,663,000	3,514,000	7,252,000
rolina.	595,000	14	11,431,000	2,442,000	681,000
,	1,240,000	36	10,502,000	7,600,000	2,566,000
land,	109,000	62	11,023,000	2,843,000	325,000
	1,520,000	48	5,706,000	8,321,000	2,604,000
d, Country,	470,000	12	1,927,000	*	*
e,		11	6,974,000	1,990,000	1,800,000
e,	830,000	20	8,056,000	3,000,000	*
cut,	310,000	33	8,705,000	4,437,000	462,000
y,	780,000	16	7,020,000	5,710,000	2 600,000
	691,000	20	5,109,000	3,200,000	1,448,000
sey,	373,000	25	3,672,000	2,400,000	600,000
rolina,	753,000	18	3,425,000	3,070,000	1,290,000
	501,000	23	2,859,000	2,536,000	260,000
	686,000	13	2,087,000	3,500,000	1,003,000
mpshire,	285,000	20	1,800,000	4 512,000	144,000
,	590,000	1	1,500,000	2,311,000	1,097,000
e,	78,000	8	1,390,000	*	*
f Calumbia,	43,000	4	1,338,000	*	*
,	384,000	6	1,201,000	1,920,000	1,554,000
,	292,000	18	1,297,000	1,400,000	296,000
n,	212,000	3	660,000	*	*
in,	31,000	1	222,000	*	*
l,	17,063.000	753	$208,226,000	$116,738,000	$44,733,000

ew of the trade of BOSTON and PHILADELPHIA for the year ending 1st 1847, we are compelled to defer, together with much interesting and l matter upon the commerce of the great and growing WEST. The NEW YORK has been treated so fully under another head as to require r notice.

to we have left too much neglected the giant advances of NEW ORLEANS, rium of the boundless wealth, which yearly flows from the bosom of the nd teeming Valley of the Mississippi. With the importance of the necessary to the accomplishment of the high destiny that awaits her, ns are becoming every day more deeply impressed. The mighty "Fa- Vaters," as if not unconscious of the claims of this, his favorite child, ays a tribute to her power as he sweeps majestically on his course. To eans has been imputed a want of enterprise and an absence of those high which constitute the greatness of all large commercial cities. This an only be conceived in ignorance and persisted in from prejudice. In esy which characterises man in his daily intercourse with man, many lder sisters may learn a pleasing and instructive lesson. Her moral is not by the measure of a chopene" lower than those of her prouder . In all the pursuits of life whether professional or commercial, ability, nd enterprise are found to characterise her citizens.

peated failures of the mail early in the month caused a partial suspen- usiness, which was but little improved until the receipt of the Hiber-

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* No returns.

nia's advices on the 3d inst., which gave an impulse to the market, and sales to the extent of 14,000 bales cotton were made.

The improvement, however, which was felt in cotton was gradually lost in the next few days, though in sugars a slight advance was realized. On the 19th, rather more animation was apparent, though prices remained about the same. The advices by the Caledonia, though considered unfavorable, but slightly effected the market. Sales to the extent of 18,500 bales were made for the three days previous to the 19th. For the three following days no important changes were evident. The anticipation of late European accounts operated unfavorably upon the market towards the close of the month, and business was otherwise much retarded by the continued wet weather. No important changes are to be noticed in prices during the month in any of the leading staples.

CUSTOM HOUSE STATISTICS.

Statement of Gold and Silver imported into New Orleans, during the months of July, August and September—the Third Quarter of 1847.

Date.	Where From.	Gold.	Silver.
July 15	—Tampico,		970
" 20	—Liverpool, (86 1-2 sovereigns)	418	
" 24	—Do. (£636 in gold)	3,078	
Aug. 2	—Havre,	11,943	2,278
" 3	—Havana,		2,600
" 19	—Do.		2,800
" 23	—Campeachy,		1,500
" 25	—Turks' Island,		8,152
" 30	—Rio Grande,		15,134
" 31	—Tampico,		1,340
Sept. 4	—Havana,		7,000
" 13	—Do. (14 3-8 Mexican donbloons,)	230	2,000
" 15	—Tampico,		1,466
" 17	—Havana,		27,808
" 20	—Do.		6,300
		$15,639	$79,348
	Total Gold and Silver, $94,987		

NOTE.—Since the foregoing was written, the advices by the Cambria have reached us. Their commercial character is excceedingly important. Cotton had advanced 1-8*d.* and the monetary affairs of the kingdom greatly improved. The rate of interest charged by the Bank of England has been reduced to 5 per cent, while private Banks were offering loans at 4 to 4 1-2. The gold in the vaults of the Bank had increased to twelve and a half millions—the reserve of notes amounted to eight millions. In Manchester, the state of trade had greatly improved, and the demand for manufactured goods for China and India is said to be large and increasing. Spinners are, consequently, more disposed to enlarge the production. From the circular of Messrs. Wm. Clare & Son, Brokers of Liverpool, we gather the following particulars of the cotton trade to 31st Dec., ultimo. The imports from the United States are 117,363 bales less than last year, from West Indies 6,484 bales, and from Egypt 40,000 bales. It is greater by 23,019 from the Brazils, and 126,809 bales from India; making in the aggregate 13,919 bales less than last year. In view of these facts, it may be possible we have placed our estimates of imports into Great Britain from India, for the present year, at too low a figure. By the next steamer we will doubtless receive the annual statement of the cotton trade, reported as being out when the Cambria left. We may find occasion to made some further remarks upon this important staple.—*January* 29.

AGRICULTURE AND MANUFACTURES SOUTH AND WEST.

1.—THE CHEROKEE ROSE—AND HEDGING IN THE SOUTH.—(Concluded.)

Its Beauty.—This may not, by many, be considered an object of very great nportance in a hedging plant, still it has its claims to notice and its advantages. s these are self-evident to those with whom arguments in their favor would have ıy weight, we shall not offer them, but pass on to the mere utilitarian advan- ges. The plant is, beyond question, a very beautiful one, especially when in oom, when it forms one mass of snow-white wreaths, relieved by the rich, dark een of the leaves; and hedges of it may be still further improved, as a means enriching and enlivening the landscape, by introducing plants of the stronger, er-growing of the Noisettes and of the various running roses, at distances of irty or forty feet in the hedge.

For strength, a well kept Cherokee hedge, of strong growth, far surpasses any ıer kind of live fence; and it is a more efficient protection to crops and stock ın any other fence known to us. Unlike other hedges, where the stoutness of stems of those plants of which they are formed, is the main source of strength the hedge, this one is so bound together by the interlocking of the long shoots, ıich have been laid down lengthwise of the hedge, at different periods of its owth, as to be utterly impervious to any animal. We have seen a knowing l bull, lowering his head, and *closing his eyes* to the consequences, force his way rough the most compact hawthorn hedges of England; but we feel confident ıt a well-grown hedge of this rose would turn the Buffalo. In a field thus ıced, sheep are perfectly safe from dogs or wolves, unless these enter at the te; and hogs may be raised even close by such a neighbor as we were at one ne favored with, who cursed his negroes for "a set of worthless, sleepy-headed scals, who could not pick up pork enough o'night, in such a neighborhood, ithout compelling him to buy it!" The negroes, belonging to a plantation thus closed, find it difficult to ramble much, as they cannot cross these hedges without nsiderable labor and some risk.

Permanency.—We find that plants and hedges now exist in full rigor and riftiness, of from twenty to fifty years growth, in various parts of South Caro- a, Georgia and Mississippi. No instance has come under our notice, during ry extended enquiries and not a little personal observation, of any appearance a want of permanency, or of the plant dying out from any cause. Unsightly ps and defective places are by no means rare in even a majority of Cherokee dges; but these are ascribable solely to neglect and indifference. One half the bor and care bestowed upon an equal number of cotton plants, would keep the ung hedge in such a rigorous, growing condition as entirely to prevent gaps.

In facility of propagation and after culture, the Cherokee Rose equals rn or cotton. But of this, anon.

Of its freedom from disease and from injury by stock or insects, we n speak positively thus far. We may expect, however, that as the plant itself multiplied, its insect enemies will also inevitably increase—not by *spontaneous neration*, however, but by a natural increase from a natural cause.

No degree of cold experienced in South Carolina or Mississippi affects this ınt injuriously. The winter of 1834–'5 was a remarkably severe one and par- ularly destructive of vegetable life. We find it stated, in a very interesting rospect of that season, as experienced at Charleston, in the 8th vol. of So. riculturist, that during "the end of the year 1834, the temperature was mode- e and uniform," which "by rousing the vegetable world from its torpor, pre- red the way for that devastation and havoc, which spread far and wide." This ntinued with no very important change. At nine o'clock, on the night of 6th bruary, 1835, the thermometer stood at 48 degrees. At a more more advanced riod of the night a very severe change took place, producing showers of sleet ıich fell at short intervals. "The succeeding day the weather moderated, and hough cool, the influence of a bright sun rendered the temperature agreable til towards evening, when old Boreas sent forth a chilling blast from the North- st, approaching to a pretty severe gale, diminished the temperature down to 20 grees, at 9 o'clock, P. M. This was succeeded by Sunday, the 8th." It was the ldest day ever experienced in South Carolina, so far as recorded. "The ther- ometer stood, after sunrise, 5 degrees above *Zero*, leaving scarcely any doubt at it must have been at Zero previous to daylight. The salt-water in the docks and mill-ponds in the neighborhood of the city, was frozen." Green-houses afforded no protection to exotics. Fig trees, myrtles, oranges, etc., etc., as far South as St. Augustine, were cut down to the roots and many utterly destroyed. We presume it was at this time that M. Noisette, whose residence and nursery near Charleston had long been celebrated for their beauty, lost his magnificent collection of Carnellias, the growth of many years—planted and nursed by his own hand—and unequalled in size and splendor. The old gentleman, in the morning, gazed upon them, all blasted and killed to the ground; and, it is said, re-entered his house without uttering a word, took to his bed and in a few days, died!

The Cherokee Rose was not affected by this sudden and severe change. It will even thrive as far North as Maryland. The late Mr. C. E. Rowand, of South Carolina, aiming at a great public good, actually distributed some hundreds of parcels of cuttings of this plant, about the the year 1820 to '23 to an equal number of his fellow farmers in the Southern States; at the same time publishing in the American Farmer directions for its cultivation, etc.; and requesting, as a very moderate return for so much trouble and expense, that the recipients would report their suscess or failure, through that journal. Some *half dozen* did so! Poor encouragement to others to follow the liberal example of Mr. Rowand. Through those who did report—Am. Farm., vo. 7—we learn that Mr. Wm. H. Tilghman, Plinlimman, Talbot county, and Edward Stabler, Jr., Harewood, Montgomery county, succeeded in growing the plants; of their success we have no knowledge, after the first three years. We are thus particular, to satisfy enquiries that have been made of us from Pennsylvania and Virginia, and we would be glad to learn if the rose still flourishes at these places.

We have much to say upon its ADAPTATION FOR HEDGING PURPOSES, TO THE CLIMATE AND WANTS OF THE SOUTH, AND TO FARMS CULTIVATED BY NEGROES. Fences we must have. Timber is becoming scarce everywhere; and many districts are so completely exhausted as to be, measurably, abandoned from an actual want of fencing material; the lands being too much worn, under the same wasteful course which destroyed the timber, to repay any outlay for enclosing. Timber, exposed to the weather, decays very rapidly in our climate; so that fences of that material require very frequent repairs and do not last long. The tax upon the labor of a plantation is enormous, even when well timbered; and still more, of course, where much hauling is requisite. Many of the finest plantations on the lower Mississippi have no fencing timber, and cypress pickets have to be purchased for that purpose. Great part of Texas consists of prairie, on which the plant will grow most vigorously, forming an impassable fence in a very few years; and, with the China tree (*melia azedarach*) from its hardiness, rapidity of growth and excellence for fuel and other economic purposes, will be the means, we confidently predict, of settling up millions of acres of that fine country which would, without these, remain forever uncultivated, though by no means barren, wastes. Add to these the Pise, or dry clay house, and all the objections to a settlement in that magnificent stock country are done away with. Give Illinois such a plant for hedging, and a tree equal in value, rapid growth and easy cultivation, and she would quickly become the first agricultural State of the Union. As it is, notwithstanding the rigors of her climate and great dearth of timber, she makes lengthly strides towards the first rank.

The advantages of a proper subdivision of plantations by permanent enclosures, are sufficiently apparent. They are the very foundation of all improvement. The many fine tracks of hill-land, in these Southern States, which have had the cream skimmed from them, in repeated crops of cotton and corn, without other rotation and without manure, and have become cut up by gullies and stripped of their timber, might yet be reclaimed for other and highly profitable kinds o farming by being promptly hedged in before it is too late. They might then should the owners find it advisable to move their forces on to newer and richer lands, be turned into sheep farms or disposed of to advantage for that purpose Without fences or fencing materials they are worthless.

Of the RAPIDITY with which A PERFECT AND SUBSTANTIAL FENCE CAN BE FORMED of this rose, we will only remark that if properly planted, and tended with a reasonable degree of care, in four years a protecting fence may be dispensed with and six years growth will render it proof against the most breachy stock.

Having thus enumerated the most prominent and valuable qualities of this plant for hedging purposes, we proceed to name the only objections, we are aware of, to its employment in that way, to any extent.

The great space occupied by an unpruned Cherokee hedge, is the principal bjection made to it. But for *this* the plant should not be blamed. If planted, as t always should be, in a straight line, and not following the zig-zag of the rail ence, it can readily be kept within a reasonable limit, say with a base of from hree to five feet. And the labor requisite to keep it thus within proper bounds, s not greater than is needed to keep up a rail fence; with this very great advantage, that the trimming may be done at any season of the year when the planter s most at leisure; and even if neglected for years, the only evil arising will be he temporary loss of ground occupied by the encroachment. The harbor afforded o vermin, snakes, rats, rabbits, birds, etc., is, in fact, a serious objection. The ifficulty can be greatly lessened by trimming and keeping clean; and still more y providing for the negroes a few small, wire-haired terriers, in place of the great, worthless, sheep-killing, food-consuming curs, most of them are now permitted to have about their houses.

We have an anxious doubt to express, at this part of our subject, and which we name with much hesitation and after long and serious thought. It is, that the Cherokee hedge will *and does* afford protection to the cotton moth, either in its image or crysalis form, in one and most probably both of which it most certainly hybernates. We throw out this suggestion, as remarked, hesitatingly; as it may prove that we are altogether mistaken; and, in the meantime, many may be, thereby, deterred from doing that which has been already too long postponed. It will not prevent our planting some miles of hedge, this winter.

THE MODE OF PLANTING most commonly pursued, has been to make holes with a spade or other implement, under the rail fence, following the *worm*, and inserting cuttings quite close together, say every three to six inches. By this method the most of the cuttings take root and grow, being kept cool and moist by the lower rail of the fence. Others, also following the *worm* of the fence, plant a short distance from it, putting the cuttings in with a spade or grubbing-hoe. Any plan of hedging which occupies, at the very start, a space of five feet in width, is objectionable. Still more so is the crowding together so many cuttings, by which the plants are weakened at the first, and never afterwards acquire strength, even if tended, to form a substantial fence. The impossibility of tending the young hedge during the three first years of its growth, so as to give it complete possession of the ground, to the exclusion of briars, vines of various kinds, cane, China rees, etc., by which so many of those now growing are disfigured and injured, is even a more serious objection to its being crowded into the fence corners.

In order to have a strong and regular hedge, it is indispensable to have healthy, vigorous plants. These cannot be produced without *cultivation* and *space to each plant.* With the Cherokee Rose this is especially the case, as stout and vigorous shoots are needed from the first, that the *base* of the hedge may be composed of such. If consisting of shoots, the delicate growth of crowded plants, these are quickly choked out by those stronger shoots, which those plants that ultimately take the lead throw out, leaving the bottom and middle of the hedge a mass of dead spray.

The method of forming hedges of the Cherokee Rose, which we recommend as he true one, suggested by *theory*, thoroughly tested in *practice* and now offered as he result of *experience*, is this:—UPON A HILL-PLANTATION, already under fence, remove the fence; *grub out* every bush, briar, cane, etc., and *cut down* the large rees that will in any way shade or affect the hedge-row; upon the poorer portions apply a dressing of any manure that may be at hand; break up the ground with a good two-horse plow, bedding it, to the width of twenty feet, or as wide as practicable; run a heavy harrow two or three times along the bed thus formed, and it is ready for resetting the fence—which do to one side, so as to allow of the young hedge being tended with plow and cultivator. If the hedge-row embraces any new land, it is best to rake or burn off the leaves and twigs, or plow deep enough to mix sufficient earth with the light, leafy matter on the surface, to counteract its chaffiness. Where it crosses any low, wet spots, throw up a bank with the spade, leaving a ditch on the lower side sufficient to drain the bank to the depth of from three to four feet. Let all this be done as early in the fall as practicable.

If intended to enclose WOODLAND, to remain as such, a space of *at least* sixty feet must be cleared for the hedge-row, as this plant will bear no shade. It is not necessary to fence it in from stock roaming at large, as they rarely injure it. A range of poles, raised two *or three feet* upon forks, immediately over the plant, will be all *sufficient.*

River-bottom lands must be drained to grow good hedges. The bank of any ditch that drains the land to the depth of three feet, the contents of which form the bank will answer well. Occasional flooding of two or three days duration we have never found injurious. Standing-water, however, would inevitably destroy the plant.

Prairie-land must be broken up *during the previous May or June*, to the width of thirty or more feet; then bed up in the fall, as above directed, preparatory to planting.

At any time, when the condition of the soil will admit, from the first of November until the first of March, but the earlier the better, plant the cuttings. These are to consist of pieces, from twelve to fifteen inches long, of *strong shoots* of the previous summer's growth, cut with a sharp knife or a pair of those stout shears, made on purpose for rose pruning and which make a draw cut—*not* chopped into lengths with a hatchet. This may be done during wet weather, assorting the cuttings with the tops all one way and burying them half their length in moist ground until wanted; but it is better to set them out as they are cut from the plants. If the cuttings are to be transported to a distance, they may be packed closely in a box or barrel with alternate layers of moss from old logs, made *moist* but not *wet*.

After staking out or marking with a line or otherwise, the intended line of hedge, trundle along it a wheel made of two inch plank, three feet in circumference, in the edge of which is inserted a stout peg, which of course will make a hole every three feet. Let any requisite number of hands, with spades, dig small trenches at each of the peg-marks, say fifteen inches long (across the hedge-row) ten inches wide and ten deep. One steady hand follows with a basket of cuttings, and inserts three in each trench, at least two-thirds of their length in the ground, drawing in some of the loose dirt with his foot and pressing it *firmly to the base* of the cuttings. If the soil is good, the trenches may then be filled up. by other hands following with hoes, and pressed down lightly with the foot: but if poor or thin, let the trenches, by all means, be filled up with rich compost, or cow-pen manure, from a cart which should follow the one who plants.

It has been objected to this mode of planting that it entails considerable labor and some care; and that the distance between the cuttings is too great. When the object to be attained is considered—that of forming a permanent and cheap fence, and within as short a period as possible—the care and labor requisite do not deserve a thought. If true in any instance,, that *what is worth doing at all, is worth doing well*, it is assuredly true in this. The writer planted in this manner, filling every trench with compost, at the rate of fully one-third of a mile per day, with five ordinary hands and one cart. The land was very poor, yet the result is a most promising young hedge, without a gap in the whole. The increased distance between the plants is indispensible to a vigorous, hardy growth; not a tithe of the cuttings are needed; the work can be done in a much more perfect manner; and the after tending is materially lessened and facilitated.

Immediately after working over the corn the first time, throw a light furrow to the young rose plants, moulding with the hoe and carefully cutting out or covering every weed and sprig of grass. At the next tending, which should not be delayed long enough to permit any part of the hedge-row to become foul, draw out the extra plants in each trench, leaving only one, and taking care not to loosen the earth round the roots of that one in pulling out the others. The cultivator usèd twice and the hoes once, after this, will suffice.

At some time during the following fall or winter, let a careful hand cut off, with a sharp knife or pair of rose-shears, every sprout or shoot, to within a foot of the ground. Early in the spring bed to the plants with a good turning plow, to the width of four feet on each side, previously top-dressing the poor spots with any convenient manure. Once during the summer let the hands lay up the shoots, which will be numerous and strong, lengthwise of the hedge, using light forks, and *pressing the shoots down*. This must be done again in the fall or winter; when the ground on each side should be again plowed. After which no further tending will be requisite, other than to chop down weeds and briars twice during the summer, laying up the shoots snug by, as before, until the hedge has height and width of base sufficient. To this it must be limited by the use of light bill-hooks, with long handles, each winter.

We have had satisfactory assurance that stronger and more vigorous plants are produced from seed than from cuttings; and that the seeds vegetate rapidly under proper management. Seed is produced abundantly; it can be easily obtained and transported to any part of the country; and it can be sowed in less time than cuttings can be properly planted; requiring, however, much more care in the after tending during the first year. Except in the facility of transportation to a distance, not much is gained by the use of seed instead of cuttings. The *hips* must be gathered during November, mixed with two or three times their bulk of sand or mellow earth, and kept in a cool, damp cellar or pit until the beginning of February, when they must be picked or sifted out, and rubbed to pieces, so as to separate the seeds from the husk. The ground having been prepared as for planting cuttings, half a dozen seeds may be dropped at the distance recommended and covered with half an inch of loose soil, the dropper then pressing the spot lightly with his foot. They will soon sprout and grow, and must be then kept completely clear of weeds—seedling roses will bear *no* shade of that kind. The surplus plants had better be pulled up, leaving only two or three in a place; one only being left, the next spring, to form the hedge.

Unless where their scarcity may render it an object, it is better not to transplant either from seeds or cuttings. Nothing is, otherwise, gained by it, and the labor is much greater than in planting cuttings. Layers make strong plants, but we do not use them, for the reason given above.

We will close by remarking that the cutting and seeds of the Cherokee Rose may be obtained in many parts of the country. In the vicinity of New Orleans, Natchez, Bayou Sara, Baton Rouge and many other points on the Mississippi; and of Charleston, S. C., Savannah, Geo., Mobile, Ala., etc., etc., they can be procured, we presume, without the slightest difficulty and at but trifling expense. To those *subscribers to the Review* who may not be able, otherwise, to procure them, and especially to residents of the prairies of Texas, we will with pleasure forward cuttings or seeds, being put to no expense in the matter. T. A.

II.—PRODUCT OF RUM ON SUGAR ESTATES.

We find the following in a late number of Simmonds' Colonial Magazine, published in London. It is richly worth the attention of our planters, and we would suggest a careful perusal. The day may come when the monopoly of the West Indies in this particular will be disturbed materially by our competition.

The Manufacture of Rum, it may be premised, consists of two distinct chemical operations, viz:—1st, the preparation of the wash or liquor for distillation, and the distillation itself: with the first of these processes only at present we have to deal. The 2d, from the great improvement that has taken place in the construction of the stills, may, with propriety, be denominated more a mechanical than a chemical operation, and requires neither science nor ingenuity for its accomplishment.

In the first place, then, for the sake of illustration and brevity, let me explain in language adapted to the capacities of all, the terms in general use in our liquor lofts and distilleries.

A can of rum means - - - - - - - -	5 gallons.
A pail of sweets - - - - - - - - -	5 ditto.

A gallon of sweets is a gallon of molasses, or 5 gallons of skimmings; in speaking of a gallon of rum it is understood proof 25.

The great object to be obtained in all still houses is to convert every gallon of sweets used in the process into a gallon of rum, pf. 25, or of the strength that will just sink a drop of olive oil, and let it be understood that I speak in general terms for our climate without alluding to the difference of apparent strength caused by a difference of temperature; that fact, although worth knowing, is more a matter for consideration to those who may be induced to try chemical experiments than for the every day operations of a distillery in these islands.

Two large receivers are necessary on an estate making 100 hogsheads of sugar, and converting the whole of the sweets derived from that sugar into rum, for the skimmings of one day ought not to be used, till an active fermentation has taken place in the receiver *containing the first* day's accumulation.

The first *thing to be done before carrying* the skimmings into the liquor vats is to remove from their surface the grosser part, which may be advantageously used in feeding stock. I would then give each vat at least six pails per cent. of skimmings, and fill it up with cold water till within ten inches of the top. (I say *cold* water, for I do not approve of the sweet water from the coppers being used till perfectly cold, as it is sure to produce a tendency to the acetous fermentation.) The use of lees seems, of late years, to have gone completely out of fashion, and I think the quality of the rum is improved; but, formerly, the lees of the previous day's distillation formed a large proportion of the setting, and, I have no doubt, advantageously, if used with discretion, as it contains in most cases a quantity of unfermented sweets, and also the principle of active fermentation in itself, if not too often used. Having given each vat its due proportion of skimmings and water, cover them carefully up with covers made of board in preference to rosseaus or cane tops, for the purpose of confining as much as possible the carbonic acid gas, it being also an active element in promoting fermentation. Next morning the vats must be all carefully skimmed, and, if a brisk fermentation has commenced, which will naturally be the case, they will be in a fit state to receive their first charge of 5 per cent. of molasses, after which the contents must be well stirred and mixed together from the bottom. On the third morning, having gone through the same process of skimming, finish charging by giving your intended proportion of sweets, which, in the first round of the liquor loft, ought not to exceed 15 per cent. of the contents of the vat. Some distillers never exceed this proportion during the whole crop, but I could never ascertain the reason, nor was I ever induced to follow implicitly this limit. I was always guided by the return, and I could see no just cause, if I got a gallon of rum for a gallon of sweets used, to limit myself to such proportion; and, in consequence, in the middle of crop, I have used 18 or 19 per cent. of sweets with advantage as to the quantity and strength of the rum, besides a saving of fuel, time, and wear and tear of the still.

When it is desirable to convert the whole of the molasses into rum, I would recommend the following method of making a mixture of the same value as skimmings; put 10 pails of skimmings, 2 pails of molasses, 5 pails of lees perfectly cold, for every hundred gallons of the contents of the vessel in which the mixture is made, and fill up with water; allow it to ferment and use it as skimmings. This method, when the molasses is accumulating, will be found useful, and enable you to finish the rum crop as soon as the boiling is done, which is of great importance, as a proportion of skimmings in the liquor will insure better fermentation, and, consequently, a better return of rum than when the liquor is entirely made up from molasses as sweets, and mixed with lees and water. After the last charge of molasses, fill up all the vats with water, and skim and mix each daily for five or six days. After the fourth or fifth day's fermentation, the liquor in the vats, which had been in great commotion, will gradually subside till the eighth or ninth, when it will have entirely ceased to ferment, and be nearly the temperature of the surrounding air, and only a few bubbles be observed occasionally rising to the surface.

It is now fit for the still, and the sooner it is distilled the better. Draw out the plug in the bottom of the vat very quietly (the head of which ought to be immersed a little below the surface of the liquor, to prevent the accumulation of acidity round it,) disturbing as little as possible the wash, till nearly empty, and as soon as it has become thick and muddy, replace the plug, without allowing the sediment to enter the still, for that proportion contains no alcohol, and is a mere *caput mortuum*, and only tends to burn the bottom of the still, imparting to the spirits that disagreeable flavour, known by the appellation of "still-burnt" rum; then wash out the vats with a pail or two of hot lees, and they will be in a fit state to be proceeded with as before.

Great care must be taken to prevent the wash changing from the vinous to the acetous fermentation, for in this climate they follow one another in quick succession; in fact, I have known many instances where they were both going on at the same time; in that case no time ought to be lost in distilling the liquor, taking care not to use the lees in any subsequent setting: the vat ought then to be well washed out with boiling water and coated with thick temper-lime water; this was more necessary formerly, when the lees formed a proportion of the next operation; it is still very requisite, as the innumerable flies which accumulate round a bad vat will communicate the taint to the others. Should the liquor loft, by any unaccountable means, get into bad condition, and the wash show a tendency to run into the acetous fermentation, I would recommend the plentiful use of the milk of lime to whitewash the vats as soon as empty, and also if thought necessary the fumes of burning sulphur may be applied with great advantage.

The universal complaint, and the reason given for a failure in the returns from the liquor is, that the still-houses where the fermentation goes on, are *too cold*, and you will find every door and window shut to keep the loft hot; while the contrary, without exception, is the true cause. In such cases I have insisted upon a free admission of air, and the consequences have been universally what I expected—better returns.

Every one engaged in a distillery ought to know, that between 68 and 77 deg. of Fahrenheit's thermometer, is the temperature best calculated for promoting the vinous fermentation, and there are none of our liquor lofts or distilleries which do not exceed that extreme by many degrees; but it is the variation of temperature between the excessive noon-day heat, under a tiled roof, and the chill at night, that causes the mischief complained of, and not the cold; and our endeavors ought to be to assimilate the temperature as nearly as possible, by admitting the cool air during the day, and excluding it at night. I shall now add a table of the proofs of spirits, corresponding with the glass beads commonly in use, which will be found useful in estimating the number of gallons actually made, when reduced to the strength of proof spirits: —

Bead marked	17	indicates	41	per cent. over-proof.
“	18	“	38	“
“	20	“	27	“
“	21	“	24·5	“
“	22	“	19·5	“
“	23	“	16	“
“	24	“	11·5	“
“	25	“	6·8	Tobago proof.
“	26	“	0·5	ditto.
“	27	“	5	under proof.

III.—EAST INDIA RICE.

The following will be of interest to our readers who are at all concerned in those staple products of the Indies which vie with those of our own country. We have shown in previous numbers of the Review, the progress which India has made in sugar and in cotton—the results in rice are equally important. We extract from the paper of Geo. W. Johnson, published in London, Colonial Magazine, No. 13, p. 15, and shall continue the subject in succeeding numbers of the Review.

Rice.—*Oryza sativa.*—Dr. Roxburgh considers that the wild rice, known as *Nivari* in Sanscrit, as *Newaree* in Telinga, and as *Aruz* in Arabic, is the parent from whence has sprung all the cultivated varieties, of which he says 40 or 50 are known, but Baboo Rhadakant Deb enumerates 120.—(Trans. Agri-Hort. Soc. ii. 235, &c.

It must not be supposed that these are all permanent distinct varieties: many of them are doubtless the same variety which is mentioned in the list by other names; and others are similarly mentioned by several titles, though only casually altered in appearance or quality by being grown on different soils or, at different seasons. Whether grown in a cold or tropical latitude must effect a great change in the appearence of a variety gradually introduced from one climate to the other. This must occur to a greater extent with rice, perhaps, than with any other cultivated crop. Thus we see it growing in the plains of the most equatorial districts of Hindostan; and we find it in the lofty mountains of Joomla, towards the Himalaya, in Nepaul, where it sustains, without suffering, the circumstances of frost and snow. Dr. Wallich says: "It was sent to England about the year 1820; it vegetated there most vigorously, but was sown too late to permit its ripening its produce.* Still further north, and at a greater elevation, it yet continues fruitful. A kind of rice is grown on the terraces cut into the sides of the Himalaya mountains.† In the interior of these mountains, barley is not sown until May or June, and reaped in August or September; while on the exterior ranges, the harvest is gathering in, at the very time the seed is sowing in the interior, or at greater elevations. It is at this period that the rice is sown in places within the influence of the rainy season, which extends from about the middle of June to the end of September. In some places rice is irrigated, and in others it is not; but rain falls very frequently, and the air is always in a moist state from being charged with moisture from the heated valleys, and depositing it on the mountains, when it reaches an elevation where it becomes cooled below the point of saturation.

Soil.—Rice delights in a fertile soil; some varieties require the soil to be constantly flooded, and then it ought to be silicious; others require upland aluminous land, but in either case it must contain a more than usual quantity of decomposing animal as well as vegetable matter; and, whatever may be the mode of sowing or planting adopted, the soil cannot be reduced previously to too fine a tilth.

Manures.—The small quantity of dung applied by the native cultivators to this crop will be noticed incidentally when considering the modes of its insertion. No doubt can be justifiably entertained as to this niggardness being injurious, and that a much larger increase of grain would be the consequence of a more liberal application of such decomposing organic matter.

To the upland dry land crops I would recommend the application of common salt, in small quantities. One variety grown in the southern part of peninsular India, and noticed in the preceding list under its Malay name, *Culandeu*, will not thrive in a soil where salt is not present. Four or five bushels per acre is probably a proportion that will be found highly beneficial.

Sowing, &c.—Throughout India the three following modes of sowing rice are practised:—1. The seed is sown dry in the fields, where the plants are to grow to maturity. At Seringapatam it is called the *Bora butta*, or *Punejii;* in Malabar, *Podi-wetha.* 2. The seed is made to germinate before it is sown; this is known at Seringapatam as the *Mola butta*, in Malabar, as *Chetu-wetha.* 3. The seed is sown thickly in a seed-bed, and the plants when a foot high are transplanted into the fields, where they are to remain until harvest; at Seringapatam this is called *nati*, in Malabar, *nearra.*‡

The cultivation differing in each of these modes, it will be most intelligible to consider them separately.

It must also be observed, that there are two distinct crops of rice usually raised annually; one being sown just previously to the rains, and the other during the dry weather. In Mysore, the first is known as the *Hainu* crop, and the second as the *Caru* crop; by which names, for the sake of brevity, I shall distinguish them.

The *Caru* crops in Mysore, according to the time of sowing, are known by three names. If the seed is sown at the most favorable season, it is called *Cumba Caru;* but if, from want of power in laborers or cattle, some is too early and some too late, the first is called *Tula Caru*, and the second *Mysha Caru.* These variations cause a deficiency of from 30 to 50 per cont. in the crop. The produce of the *Hainu* and *Cumba Caru* crops is nearly the same.

Dry Seed Sowing.—For the Hainu crop this is regulated by the time of the setting in of the rains. In Mysore, three days previously to the first sowing, about the middle of February, the soil is softened by being watered. It it then plowed twice a month until the end of May. After the fourth plowing, manure, obtained either from the cow-house or city, is put on. After the fifth plowing, if rain does not fall, the field must be watered, and three days subsequently the seed is sown broad-cast, and covered by the sixth plowing. Any rain falling during the thirty days immediately succeeding the sowing, is allowed to run off through an opening in the enclosing bank. If much rain falls at this time, the crop is considerably injured. If no rains have occurred during those thirty days, the field is kept constantly inundated until the crop is ripe; but if there have been occasional showers, the inundation is not commenced until the forty-fifth day.

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* Trans. Agri-Hort. Soc. of India, vol.iii. p. 82.

† This variety yields a larger proportion of pure farina and starch than the varieties grown in the plains, and altogether appears to be a more nourishing article of food, and, therefore, deserving of consideration. It is reaped in the beginning of November.

‡ *Buchanan's* Journey through Mysore, vol. i. p. 84.

[TO BE CONTINUED.]

IV.—TEXAS SUGAR.

The annexed letter, from a gentleman in Texas, we insert in fairness. The whole truth should be known in every matter. If Judge Rost has been led into error, he will be happy to have it corrected. Will our friend, therefore, favor us with the proposed paper, for which a space in the Review is reserved.

GALVESTON, January 10, 1848.

J. D. B. DE BOW, ESQ.,

In reading the last number of the Commercial Review of the South and West, wherein the manufacture, machinery and introduction of sugar are largely commented upon, I was inclined to believe, and find my opinion strongly supported by some of our oldest settlers on this island and in its neighborhood, that the references to Texas, which are on the 434th page, are greatly erroneous and, as I may say, totally incorrect.

I would have sent you an article in answer to some of the remarks about Texas, by this opportunity, but, wishing to know whether an article, differing so widely with the facts set forth by Judge P. A. Rost, would find a place in your paper, I deferred doing so, until being advised by you.

The individual named, and upon whose information the article has undoubtedly been written, appears to be unknown to every old settler, and I have found it yet impossible, though I have tried hard, to find out a person who may know such an individual; but all my exertions have been in vain.

Those persons who have tried the cultivation of sugar in this neighborhood, have, up to now, found no reason to complain of the soil, etc.

V.—PRODUCTION OF SUGAR IN SOUTH CAROLINA.

ROBERTVILLE, Beaufort District, S. C., 15th December, 1847.

J. D. B. DEBOW, ESQ.:

THROUGHOUT St. Peter's parish and the upper part of St. Luke's and Prince William's, almost every planter cultivates a patch of from one-fourth to one or two acres of the cane, but comparatively few are prepared to manufacture it. In the parts of the district mentioned, there is scarcely a log cabin to be found, even on our poorest soil, where there is not attached to it a small patch, well manured, on which they very successfully cultivate a sufficiency of cane to furnish their families bountifully with syrup, and many of them with their years' supply of sugar. Such of them as are prepared for manufacturing, grind and boil for their neighbors, retaining one-third for toll. The yield of sugar to the acre, I am inclined to believe has not been less, upon an average, than 1000 to 1200 lbs. of excellent quality, besides a considerable quantity of syrup. I have heard of six barrels made to the acre, say 1500 to 1800 lbs. It is ascertained that stable manure produces the best sugar both in quantity and quality. In one instance, I have been informed, that the land cultivated had been *too highly manured*, by cow-penning thereon, to produce sugar: the cane grew very luxuriantly and made excellent syrup; but from some cause, perhaps a want of skill in boiling, it could not be reduced to sugar. The very general success, however, has been such that it appears to be a universal determination to cultivate and manufacture the cane more largely in future. It is manifest that our *poor* lands, *without* manure, will not produce sugar; but when manured, will make three or four times as much in weight of sugar as they could of cotton, besides the syrup. A want of skill in manufacturing heretofore, has been a principal cause of so little cane being planted. But the *small* planters find it to their interest and convenience to so far turn their attention to its cultivation, as to make their own supplies in future. The more *opulent*, who have been depending on their overseers and their *long* staple, it is apprehended, will not very readily turn their attention to it. The one absorbing interest of making cotton and rice, has too generally superceded that attention (which would be beneficial to our planters generally) that should be bestowed on what they think *small matters*. The *small* planters and farmers are, generally speaking, the most independent and prosperous, because more personally attentive and enterprising. There can be no doubt that our climate is admirably adapted to the production of sugar, and, with proper attention to manuring, it would be more money-making than the overplanting of cotton. The machinery for manufacturing the cane is very simple. The whole cost of mill, boiler, furnace and sugar-house, to many of our *small* planters, probably does not exceed from $50 to $100 at most; and the fixtures generally, embraced in this calculation, are so simple as to require very little mechanical skill; perhaps the only cost of *money*, very generally, is the purchase of the boilers. No doubt, however, there might, and would be a great improvement in machinery, when the cultivation of the cane becomes more extensive. And that there will be an increased attention to this business, I have no doubt, especially if the present depression in the price of cotton continues.

Respectfully, yours,
ROBERT G. NORTON.

VI.—MANUFACTURES FOR THE SOUTH—RHODE ISLAND AND SOUTH CAROLINA.

Manufacturing Industry, &c.—One great cause of the unproductiveness of our capital and labor is the want of diversion of them. In every country there is a kind of labor which experience proves to be the best and most productive of that country. In one agriculture should predominate; in another manufactures, in a third commerce; but in no one on the face of the globe has an exclusive attention to either of these branches been found the most profitable. It is the judicious combination of them all that makes a nation great, and prosperous, and happy. This is an old political doctrine; its antiquity, however, is no disparagement of its truth. For its illustration we shall go no further than the history of our own country. And fortunately for our purpose the last census of the Government furnishes data upon which there can be no dispute.

If we divide the population of Rhode Island (138,830) and that of south Carolina (549,398) into their respective annual incomes, viz: into $13,001,223 for Rhode Island, and into $27,173,536 for South Carolina, it will be perceived that Rhode Island divides, as the yearly income of each of its inhabitants, $100, while South Carolina divides only $45. If you take out the black population in both States, and make the division only among the whites, Rhode Island will divide $119, while South Carolina will divide $101. These are startling facts. Why are they so? It will perhaps be said, it is either because the people of Rhode Island are more industrious than our people, or are engaged in more profitable labor; or from both causes combined.

The first of these we are unwilling to grant. Naturally we believe there are no people more willing to work than ours, when only taught to see a profitable result to their labor. The difference in the profits of the two States must be attributed, therefore, to some other cause. The labor of Rhode Island is diversified, ours is not. Let us see. There are engaged in—

RHODE ISLAND,		SOUTH CAROLINA.	
Agriculture,	1 in 6	Agriculture,	1 in 3
Commerce,	1 in 87	Commerce,	1 in 301
Manufactures,	1 in 5	Manufactures,	1 in 57

Divide the population of the two States into families of five each; there will be 21,766 families in Rhode Island and 118,879 in South Carolina. Give to each family, and to the horses, cattle, hogs, and sheep attached to each, the amount of grain, potatoes, and hay usually consumed by them, and it will appear that South Carolina will be dificient in a self supply as much as a million and a half bushels, while Rhode Island will have a surplus of very nearly that amount. This arises from the fact that South Carolina has more horses and cattle to support than Rhode Island. Thus they are in—

RHODE ISLAND,				
1-2	a horse	to a	family	of five,
1	cow	do.	do.	do.
4	sheep	do.	do.	do.
1	hog	do.	do.	do.
6 1-2 of all kinds.				

SOUTH CAROLINA.				
1 1-2	horse	to a	family	of five,
4	neat cattle	do.		do.
1	sheep	do.		do.
7 1-2	hogs	do.		do.
14 of all kinds.				

Suppose them to be equal, and that both States have enough of wheat, rye, oats, barley. potatoes and hay to support their population and cattle, the comparative incomes of the two States would stand thus:

RHODE ISLAND,		SOUTH CAROLINA.	
Manufactures, - -	$8,640,526	Manufactures, - -	$2,248,915
Commerce, - - -	1,294,957	Commerce, - - -	2,632,421
Mines, - - -	162,410	Mines, - - -	187,608
Forests, - - - -	44,610	Forests, - - - -	549,626
Fisheries, - - -	659,312	Fisheries, - - -	1,275
Rice, - - - -	.....	Rice, - - - -	1,514,772
Cotton, - - -	.....	Cotton, - - - -	4,628,270
	$10,801,914		$11,763,986

From this estimate each inhabitant in Rhode Island, after feeding himself, will have over $99 for clothing and other expenses, while each one in South Carolina will have a fraction under $20.

The above table also shows another fact of much importance. The manufactures of Rhode Island are more valuable than the cotton and rice of Carolina taken together. In other words, the labor employed in the one is more productive than in the other two.

It is a question, then, which comes directly home to us, "Is South Carolina less capable than Rhode Island of excelling in the same profitable labors?"

We have already combatted that class of complainers who are eternally decrying the profits of agricultural labor; there is another class who elevate it too much—even to the exclusion of all other pursuits. Nothing is easier than to be so deceived. Such persons view the agricultural calling with a poetical eye and see in it nothing but pastoral beauty and happiness. Were this the occasion, no task would be more pleasant than to indulge in drawing a picture of the virtue, and excellence, and riches of a people thus engaged. As a rhetorical exercise it might afford entertainment; but the true economist, criticising the work, would pronounce it only a fancy picture, alike untrue to nature and to fact.

Besides this, the introduction of different manufactures amongst us would have an effect not less important to our agriculture—we mean the great inland trade it would create. In every prosperous country the inland or indirect trade is far greater than its foreign or direct trade. In England or New York, for instance, it is fifteen times greater. Consider then a new trade created for Carolina ten times greater than at present; consider for a moment the influence upon agriculture: how much more certainty it would afford the merchant in the investment of his capital than in foreign risks; what a numerous class of workmen it would employ; the misery it would remove by giving business to the idle, and the content and happiness it would afford the complaining. Is not such a consummation devoutly to be wished for?—[*South Carolinian*.

VII.—VALUE OF THE COTTON MANUFUACTURE.

In previous numbers of the Review we have furnished interesting particulars of the progress made by Domestic Manufactures, to which, in this connection, the reader's attention is directed. What has been achieved in Great Britain will be the subject of our present observations, in which we shall be aided by a synopsis lately published in the National Intelligencer.

There was spun of cotton yarn in England and Scotland ,in 1846, lbs.	495,033,109
Which, calling a bale 400 lbs., equals 1,237,583 bales of cotton, and at 10 cents per lb. amounts to	$49,310,109 90

Say first cost of cotton in the United States *on board* ship	7 1-4 cts.
Freight to England, 5-8 penny	1 1-4 cts.
Waste in manufacture	1 1-2 cts.
Making, per pound,	10 cents.

The total export of cotton from the United States for the year ending 30th June, 1846, was	9,388,533 lbs. Sea Island.	
	584,169,522 lbs. other kinds.	
Making	593,558,055 pounds, which	
was valued on ship board at		$42,767,341 00
or, say less than 7 1-4 cents per pound.		
There was exported from Great Britain to other countries, in 1846, in cotton manufactures and twist, [twist being nothing else but cotton yarn, or thread ready spun for the loom,] the weight of lbs.		354,291,742
Or at 400 lbs. per bale, equal to 885,729 bales; and, at 10 cents per pound, the value of the cotton before the manufacture, including waste, as above put down, the cost of the cotton used for these exports was		$35,429,174 20
The declared value of the foregoing exports, as given us by the custom-house returns of Great Britain, is the enormous sum of		$112,684,516 80
From which, deducting the cost of the cotton, as above stated	$35,429,174 20	
And cost of various articles consumed in the dyeing, dressing, finishing, &c., of the cloth, which, with fuel, &c., cannot be	8,000,000 00	
		43,429,174 20
There was left to the labor and capital of Great Britain a profit, or increased value, on the manufacture of these 885,729 bales of cotton of		$69,255,342 60

or say in round numbers, $69,000,000.

Of what did this export of cotton manufactures consist? The prepared returns say, of—

	Pounds weight.	Value in pounds sterl.
Calicoes, plain, or what we call domestics, bleached and unbleached,	148,263,548	8,702,430
Cotton yarn, or what is called twist	157,130,035	8,183,778
Making	305,393,603	16,886,208
Calicoes, printed or dyed	40,539,653	4,672,074
	345,933,256	£21,558,276

The residue consists of cambrics, muslins, dimities, *damasks*, diapers, ginghams, and checks,

leno muslins, nankeens, quiltings, ticks, eens, counterpanes, hosiery, handker- tapes, bobbins, &c., - - - - -	8,258,493	1,927,665
the total of - - - - - -	354,291,749	23,475,941

4.80 the pound sterling - - - - - - $112,684,516 80

ting over this enumeration of exports we arrive at the following very analysis:

	Pounds weight.	And the value of.
ion of plain calicoes, which are nothing t our "domestics," sheetings, printings, &c., bleached and unbleached, and of is - - - - - - - -	305,393,603	£16,886,262

ual to *six-sevenths* of the whole weight, and more than *two-thirds* of the lue of the exports.

be observed on the above facts—

ut a hundred items of profit to Britain on cotton are not included, viz: nts expended in various ways in its passage from this country to the manng towns, through all intermediate hands.

at in the coarse fabricks, which constitute so large a part of British tures, the United States should be the formidable competitor, if not the ist.

ut nothing is said of the profit realized by England on the cotton goods d at home, etc. In 1846, 141,000,000 lbs. of yarn were retained in the the profits of the manufacture of which, supposing the ratio above prewould be $27,500,000; increasing the gross profits to $96,000,000, or ouble the value of the whole export of cotton from the United States.

above there should be much to encourage us in this country, and more ly in the South, where we have the staple ready at hand, and every facilnvert it into the desired fabricks.

ollowing exhibits the comparative position of manufacturing countries:

SPINDLES EMPLOYED UPON COTTON.

		Spindles.
nd and Wales - - - - - -		15,554,619
nd - - - - - - - -		1,729,878
d - - - - - - - - - -		215,503
		17,500,000
	Spindles.	
s comprised in general Custom League	815,000	
ia and Italy - - - - -	1,500,000	
e - - - - - - - -	3,500,000	
um - - - - - - - -	420,000	
erland - - - - - -	650,000	
ia - - - - - - - -	700,000	
Total - - - - - - -		7,585,000
		Spindles.
d States - - - - - - - - - -		2,500,000 to 3,000,000
Number total - - - - - -		27,585,000

and contains 634-1000 part of the spindles in operation; the remainder of 272-1000 parts, the United States 91-1000 parts.

VIII.—NUTRITIOUS AND MEDICINAL PROPERTIES OF SUGAR.

all quantity of sugar will sustain life, and enable the animal frame to o corporeal and (as I can add from personal experience) mental fatigue han any other substance. Often have I travelled with the Arab over the g desert, or with the wild Afric through his romantic country, and, when d with fatigue and a noontide sun, we have set ourselves down beneath an geous canopy, and have *shared with our* companion his traveling proven-

mated by the Chamber of Commerce at $870,000; but, place it at a million
ien Louisiana draws an annual income from her slave labor of $17,690,000.
sing the slave population of Louisiana to be 200,000 during the five years
1840 to 1845 inclusive, as the census in 1840 gave to her 168,452, and that
ient makes the production of each slave in the State, man, woman and
amount to the sum of $88 45.

Virginia we have, or had in 1840, according to the census of that year,
7 slaves. The produce of their labor, as near as I can arrive at it, from
information as falls within my reach may be set down as follows:

co—44,865 hhds., at $70 per hhd., is - - - - -	$3,140,550
-150,000 bushels, consumed by 12,000 slaves engaged in manu-ctures, - - - - - - - - - - - -	90,000
-foreign and domestic export 2,000,000 bsh., at 50 cts. per bsh.	1,000,000
t and flour—foreign and domestic exports, - - - - -	3,557,805
exported abroad and coastwise, - - - - - - -	453,408
negroes engaged in mining and manufacturing at $140 each,	1,680,000
Proceeds of slave labor in Virginia, - - - - -	$9,921,763

s calculation makes the average product of each slave in Virginia a little
22. Thus we see that the profits of slave labor in Louisiana is more than
mes greater than its profits in Virginia.

X.—RESOURCES OF GEORGIA.—MANUFACTURES, &C.

. Nisbit, whose able article on Georgia in the Southern Review elicited so
applause—has lately made a report as chairman of the Committee on
factures, in that State, from which we extract:

rgia presents the greatest possible advantage as a manufacturing State.
s a large amount of unemployed capital and labor. She boasts a climate
ble for every kind of enterprize and exertion. And then she occupies a
phical position, which gives her ready access to the markets of the world,
ier manufactured products.

a few years have elapsed since the introduction of manufacturing into
ia. Those few years have witnessed the initiative policy, its rapid ad-
, and its triumphant success. We have in successful operation several
stablishments, with large capitals, and giving employment to some hun-
of operatives. These establishments are furnishing ironware of various
cheap in price, respectable in quantity, and unexcelled in quality. They
so preparing to supply iron for machinery, agricultural implements, rail-
and all the uses of life In the department of Cotton manufacturing, your
ittee have collected a few statistics, which they do not present as accurate,
proximating thereto. We know of thirty-two cotton factories in our State,
ration, or in progress of construction. There is employed in the buildings
orking of these thirty-two factories, two millions of dollars. The number
engaged therein, is near three thousand, and of persons directly receiving
upport from the same, six thousand. The consumption of provisions and
ltural products (other than cotton) by these factories, is fully equal to three
ed thousand dollars per annum, at present prices. Their consumption of
. per annum, reaches 18,000 to 20,000 bags, and the value of manufactured
turned out by them, last year, fell nothing short of one and a half million
lars. One-third of these manufactured goods were sold out of the State,
in the northern markets, and partially in the Valley of the Mississippi—
llimitable field of consumption which lays open to the enterprise of our
facturers.

X.—COTTON AND IRON MANUFACTURES IN SOUTH CAROLINA.

ew years ago, and South Carolina was supposed to be prejudiced against
anufacturing system, because hostile to the tariff. She maintained the re-
however, and was willing to give her attention to legitimate manufactures.

Her citizens have been awakened to the importance of the last, and the statistics of the State at the present time show the following:

Cotton Factories.—1. The De Kalb cotton factory, near Camden.

2. The Bivingsville cotton factory, near Spartanburg Court-House, now the property of G. & E. C. Leitner.

3. A new establishment now being erected by Dr. Bivings, on a large scale.

4. The Saluda factory, near Columbia, which has been undergoing repairs during the summer, but now again in operation.

5. The Vaucluse factory, near Hamburg, under the management of Gen. Jas. Jones.

6. The Graniteville factory, near Aiken, lately established and under the management of that intelligent and patriotic citizen, Wm. Gregg, Esq. His name alone is a guaranty of the success of the establishment.

7. The Fulton factory, near Stateburg, under the management of Col. Dyson, an enterprising and meritorious gentleman.

8. The Mount Dearborn factory, on the Catawba, lately put in operation, under the management of its enterprising proprietor, D. McCulloch, Esq.

9. The Marlborough yarn factory, owned by Messrs. Townsend & McQueen, and now leased to an enterprising and practical manufacturer from the North. In this factory, we understand, none but white operatives are employed; but we have not been informed of its success, since it has fallen into the hands of its present lessee.

10. There is also a small factory at Society Hill, owned by Colonel Williams, from which he supplies his own plantation, and those of the surrounding neighborhood, with a very superior article of cotton bagging. He also ships yarn to a northern market.

11. There is, besides, an extensive establishment of this kind, now in progress of construction, near Charleston, from which we have reason to expect the best results; and several minor establishments in the back country, where water power, equal to any in the world, abounds.

Iron Works.—1. The Cherokee Iron Works, on Broad River, in Spartansburg district, very extensive, under the management of Maj. Thos. T. Twiss.

2. The South Carolina Iron Works, on Paceolet, in Spartanburg district.

3. The King's Mountain Iron Works, on Broad River, in York District.

Besides some minor establishments, all of which appear to be getting on successfully.

XI.—MANUFACTURES IN GEORGIA AND TENNESSEE.

Georgia and Tennessee are destined to become the great manufacturing States of the South, if not of the Union, because they have not only greater resources in proportion to their population, but, being traversed in every direction by railroads and rivers, and having a double outlet, both to the Gulf and the Atlantic, they will possess unparalleled advantages in regard to both the foreign and domestic markets. If our people would display one half the energy and enterprise of the Yankees, in a quarter of a century from the present time we could surpass the whole of New England in wealth and population; indeed all that we now lack to develope that enterprise and energy is the establishment of manufactories, and the more general introduction of machinery.

Let us compare for a moment the agricultural wealth of the two States named with that of New England. Georgia and Tennessee have together a population of 1,694,000—the States of Maine, New Hampshire, Massachuseects, Vermont, Connecticut and Rhode Island have 2,422,000 souls. Now let us see the relative products of the two sections as developed by the census of 1840, and by more recent statistics:

	New England.		Geo. and Tenn.	
Corn	11,943,000	bushels.	83,584,000	bushels.
Wheat	2,898,000	"	9,911,000	"
Potatoes	20,581,000	"	3,792,000	"
Rye	2,582,000	"	448,000	"
Oats	11,247,000	"	9,458,000	"
Buckwheat	1,097,000	"		
	50,348,000		107,194,000	

tion to this, Georgia and Tennessee produce annually ab
ıds of rice, probably three millions of sweet potatoes,
in New England. They also have, according to the
neat cattle and 4,484,362 swine, whereas the six New
1,545,273 neat cattle and only 748,698 swine.
howing that while we have a little over half the pop
we have more than double the capacity to feed the
provisions are comparatively so much cheaper in these S
d hence the great advantage which we would have as
uring enterprise. In many parts of Georgia and Tenn ss
for less than one-half of what it would cost them at Lo ve.
eat manufacturing cities of New England. Having th s i
n regard to provisions, and a corresponding advantage in p
rial, why should our capitalists hesitate to invest their means anu-

PROGRESS OF THE AMERICAN UNION.

E IN POPULATION OF THE WESTERN TERRITORIES AND STATES—
T OF THE WESTERN VALLEYS—RATIO OF INCREASE OF POPU-
N IN THE WEST AND IN THE UNION—EXTENT OF AMERICAN
TORIES COMPARED WITH OTHER QUARTERS OF THE GLOBE—
E PROGRESS OF AMERICA.

llowing interesting particulars from the pen of Wm. Darby, Esq., for-
Louisiana, were elicited by a communication to him directed, from the
n C. Calhoun. They have been sometime on our table for publica-
we give them with a full conviction of their importance and value.

sin of the Mississippi is the southern section of the immense central
the continent of North America, spreading from the Gulf of Mexico to
bay. In general terms, the Mississippi basin extends in latitude from
egrees north, and in longitude from the extreme northeastern sources of
beny branch of Ohio, near Cowdersport, Penn., 1 degree west of Wash-
the northwestern sources of Marias river, branch of Missouri, 34 degrees
Vashington, or extending over twenty-one degrees of latitude, and thirty-
ongitude. Forty, north, is so near as to admit being assumed as the
itude. This curve, on North America, as it is over its whole range
earth, the most important of all lines of latitude, extends over the basin
ssissippi about 1,500 miles.

Population of the Central Valley, 1810.

y - - - - - - -	406,511	39,000	square miles.
e - - - - - - - -	261,727	40,000	"
- - - - - - - -	230,760	40,000	"
- - - - - - - -	24,520	36,000	"
- - - - - - - -	12,282	59,000	"
- - - - - - - -	20,845	60,000	"
n - - - - - - -	4,762	54,000	"
- - - - - - - -	......	55,000	"
pi - - - - - - -	40,350	45,000	"
a - - - - - - - -	76,556	48,000	"
- - - - - - - -	20,845	51,000	"
unt - - - - - -	1,099,845	527,000	"

lements in this table yield for 1810 a distributive population, a small
over two to the square mile. On the much more densely populated sec-
Tennessee, Kentucky, and Ohio, with a combined area of 118,000 square

miles, the aggregate population, expressed in round numbers, 917,000, the dis-
tributive population did not reach *eight* to the square mile. In this estimate. I
have not included the population of western Virginia, Pennsylvania, and part of
western New York, which sections, though in the west, or on the central basin.
were, politically, and indeed socially more particularly, attached to the Atlantic
border.

But the ratio of increase of population on the sections included was 227, or
more than double, in the decennial period—1800–1810.

By the census returns of 1820, the entire surface designated in the latter tabl
was represented to possess a distributive population of about four to the squar
mile, or an aggregate of 2,217,463, the population having again rather more tha
doubled in the decennial period—1810–1820.

In 1830, on the same surface as above, the census of that year reported a
aggregate of *three millions six hundred and seventy-two thousand five hundred on*
sixty-nine—the ratio of increase from 1820 to 1830 being 1·65; and though th
interior population had so rapidly increased, still the distributive population di
but rarely reach seven to the square mile.

The sixth census of 1840 was, if we may except that of 1790, the most impor
ant yet taken, as half a century was embraced by the extremes, and an aggr
gate of 5,302,918 inhabitants were found on the same surface as above, and repor
ed by the last enumeration, and yet, even then, the distributive population, but
little exceeded 10 to the square mile. Ratio of increase from 1830 to 1840, 1·4
And thus stood a surface in 1840, really only beginning to be peopled, and excee
ing that combined of France and the whole Spanish peninsula.

When we thus behold a wilderness, in so few years, changed from a howli
waste to the prosperous aspect presented in 1840, we are inspired with most plea
ing wonder. Yet when we reflect, our convictions, though involuntary, must
deep and enduring, that on the space designated, and on the far more extensi
regions beyond, that population has only taken its steps of infancy. In 1840,
may be easily shown by comparison, the mean density, on what could then
regarded as populated, did not reach the one-tenth of that of several sections
the Atlantic border. It ought also to be called to mind that the combined interi
under review, does not include all of "the western country" embraced by t
census of 1840. Every principle applicable to the sections named, in the l
table above, apply also to the western parts of New York, Pennsylvania, a
Virginia, which we find recorded in the census tables of 1840.

The population of western	New York, 1840, - - - - -	1,683.(
"	" Pennsylvania, 1840, - - - - -	815.
"	" Virginia, 1840, - - - - - -	147.
Amount	- - - - - - - - -	2.645.
Add	- - - - - - - - - -	5.302,
Total, 1840, in "western country"	- - - - - -	7,948,

Those parts of New York, Pennsylvania, and Virginia, embraced in the la
tabular view, taken together, embrace a length, from northeast to southwest,
700 miles, and a mean breadth of at least 100 miles; area 70,000 square mil
which added to 526,000, yields an entire superficies of 596,000, or, for all gene
purposes, we adopt 600,000, and in like manner for the population, assu
8,000,000, and we then have only about *fourteen* to the square mile.

Without attempting to compare "the Great West," or rather the compa
tively small part of it now directly under review, to the most densely popula
sections of the Atlantic border, let us see what would be the aggregate of
former, if peopled equally in proportion to Pennsylvania in 1840. In that ye
with an area of 47,000 square miles, Pennsylvania contained 1,721,033—or s
37 to the square mile—a like proportion on 600,000 square miles, would give
aggregate of 22,200,000.

Then, what comparative part of the great central basin is 600,000 squ
miles? Let us see. According to data already given in this paper, the pro
tion of surface is as 6 to 17, and a similar proportion of population to the w
central basin, yields sixty-three millions very nearly. If we suppose, as we
fully justified to do, and as I shall show presently, the latter amount reali
what will then be the density of population on the central basin? Why, ab

7, or not one-third of the number, which would be a thin population on such a surface.

In a preceding table of this paper, 1,099,158 is given as the aggregate of central population in 1810. Above, you read an aggregate of 8,000,000 for 1840, or very nearly *seven-fold* in thirty years. This, to those who have not investigated the data are startling developments; but they are deduced from the most unquestionable elements. For all useful purposes, the progress of population in the United States, general and special, can be calculated to any given year of the current century, if no longer, with all the security of accomplishment of astronomical phenomena.

By one of the wisest national provisions ever made by any people, a decennial enumeration was provided for, and under its provisions, six times has the census been taken, and produced results superior to any anticipated.

Tabular View.

Year.	Amount.	Ratio of increase.	
1790	3,929,827		
1800	5,305,925	1.354	mean 1.342.
1810	7,239,814	1.364	
1820	9,638,131	1.331	
1830	12,866,920	1.333	
1840	17,063,353	1.326	

Here we see how nearly the decennial increments give regular increase of one and a third. Such coincidence must arise from an inherent law of progress. Such laws, on which any series is found to produce regular results, must give full confidence of a near approach to certainty, from the principle that like cause and steady cause, can only yield like and steady effects.

If we take 3,929,827, and multiply by 3, on the supposition that the population of the United States advances by an increment of *three per cent.*, and operating on the principles of compound interest, the subjoined are results compared with the actual census:

Actual census amount.		Amount at 3 per cent.
1800	5,305,925	5,281,468
1810	7,239,814	7,095,964
1820	9.638,131	9,535,182
1830	12,866,920	12,811,118
1840	17,063,353	17,217,706
Difference in a period of 50 years		154,353

Here we have an authenticated example of human progress, to which history affords no parallel.

In furtherance of the solution of the problem before us, I insert here the aggregates of the annual population of the whole United States, as deduced from an increase of 3 per cent. per annum from 1810 to 1850, inclusive:

1840	17,217,706
1841	17;734,237
1842	18,266,263
1843	18,814,249
1844	19,378,685
1845	19,959,053
1846	20,557,823
1847	21,174,557
1848	21,900,792
1849	22,464,084
1850	23,138,004

We may, from every concurrent data, assume *twenty-one million*, as the existing aggregate of the population of the United States, at the present time, or year. On this the question rises, what are the proportions, on opposite sides of the Appalachian mountains? The entire population by the censuses respectively of 1790 and 1840, the ratio for 50 years, comes out 4.342 — or the population doubles in a little less than *twenty-five* years. We have already found that western population has augmented *seven-fold*, in the thirty years, 1810, 1840, inclusive. To obvious causes this increase may be attributed, but there is one not generally noticed—emigration receives more than due credit. The west gains by natural increase, and loses nothing, worthy of account, by *re-emigration.*

Amongst the natural features which give peculiarity of character to the Mississippi basin, far the most remarkable, and as regards social and political considerations, the most important, is the near approach of the northern fountains of the two great valleys of Ohio and Mississippi proper. It is impracticable to render this fact evident by means of verbal description; but it may be observed, as already stated, that in a distance of 1,600 statute miles, from the sources of the Mississippi to those of Allegheny river, only a comparative narrow strip of land intervenes between the border of the Canadian lakes and the fountains which commence the confluents of the Ohio and Mississippi rivers. In northwestern Pennsylvania, the strip does not exceed 5 or 6 to 12 or 15 miles, but the ground is high and abrupt, though not precipitous on the side of Lake Erie.

Opposite the southwestern extreme of Michigan in the northwestern angle of Indiana, and northeastern of Illinois, the intervening strip is again still more confined in breadth, and is low and flat. Westward of Lake Michigan, and south of Lake Superior, the dividing line of the waters recede from the lakes; but approach again to within a few miles westward of Lake Superior.

Extent of land eastward of Lake Michigan, and thence to the sources of Alleghany river, and intervening between the basin of Mississippi and Canadian sea—square miles. - - - - - -	33,000
Extent of land intervening between the Lakes Michigan and Superior, and basin of Mississippi—square miles - - -	90,000
Amount of square miles - - - - - - -	123,000

This place, in its broadest parts either, east or west of Lake Michigan, is not 200 miles wide, and, in its narrowest part, southward of Lake Michigan, not two miles wide. The average breadth about 75 miles.

So near, indeed, and so blended are the two basins of Mississippi and Canada, and the intervening space included in the domain of the United States, that it would not do great violence to natural laws, and be consonant to political connection, to unite them as parts of one whole; the more, as in fact they are both parts of the great central basin of the continent of North America.

Similar remarks may again be made on the opposite extreme, towards the Gulf of Mexico, as Texas on the west, and the consecutive valleys of Pascagoula, Mobile and Apalachicola on the east, form parts of the same great inclined plane with the basin of the Mississippi.

Texas, taken in its widest extent, is bounded by the Rio Grande on the southwest and west, by the Gulf of Mexico southeast, and on all other sides by the former contiguous territories of the United States.

From the mouth of the Rio Grande, nearly on north latitude 26 degrees, in a direction of nearly north-northwest, the length does not much exceed or fall short of 1,000 miles. From the point where the one-hundreth degree of longitude west of London, leaves Red river to the Rio Grande, in a direction of southwest by west, the width is about 300 miles and the mid distance of such a line would fall nearly on longitude 25 degrees west of Washington city, and on latitude 32 1-2 degrees north. Such a line would represent what may be called the Narrows of Texas, and if drawn would divide the country into two sections, and which might be relatively called Southeastern and Northwestern Texas.

Southeastern Texas has a form rudely approaching that of a trapezium base along the general course of the Rio Grande, 600 miles, and perpendicular of 500 miles, falling from the northeastern angle of Red river. The curves in the outline, however, yield an area of about 180,000 square miles. The slope gentle, and in a southeastern direction obliquely towards the Delta of the Mississippi, as shown by the general course of its rivers.

Northwestern, or Higher Texas, approaches a square of 350 miles each side, or area about 120,000 square miles. The features of higher Texas are peculiar.

The western part, formed by the deep though narrow vale of the Rio Grande, declines southwardly; whilst, with a chain of minor mountains or hills intervening, the much larger section slopes eastwardly, and gives source to the Brazos, Red river of the Mississippi basin, and to the higher branches of Arkansas. Regarding Rio Grande as a fixed boundary, the preceding elements produce an aggregate area to all Texas of 300,000 square miles, equal to 192,000.000 of acres, and about equalling the whole Atlantic border of the United States.

Eastward of the lower part of the Mississippi basin, and southward of the valley of Ohio, the united valleys of Pascagoula, Mobile, Apalachicola, and some minor streams, drain a surface of about 65,000 square miles, having, as is the case with lower Texas, an inclined slope towards the Great Delta, and may, for all statistical purposes, be included in the same system.

Summary table of that part of the Central Region of North America now included in the dominions of the United States, and spreading from the Appalachian on the east to the Chippewayan or Rocky mountains on the west, and named, from its principal river the Basin of the Mississippi.

Natural Sections.		*Square Miles.*	*Aggregate Acres.*
Missouri, - - - -	500,000		
Mississippi proper, - -	180,000		
Ohio, - - - -	200,000		
Lower Mississippi, - -	330,000	1,698,000	
Canadian lake border, -	123,000	or, in round sum, 1,700,000	1,088,000,000
Texas, - - - -	300,000		
Mobile region, - - -	65,000		

To give more distinct ideas of the real and comparative extent of the central section of the United States, the following data are introduced:

A due north and south line from the mouth of the Rio Grande, at very near 21 degrees west of Washington, to north latitude 49, measures within a very small fraction of sixteen hundred miles; a distance differing little from that between the straits of Gibraltar and the Orkney Islands, or that from Cape Metapan, in the Morea, to the Gulf of Finland.

The Balize, at the outlet of the main pass of the Mississippi, is at north latitude 29 degrees 4 minutes, and west longitude west 12 degrees 8 minutes. The extreme western fountains of Marais river, or those of the Mississippi basin, are at longitude 35 degrees west of Washington, and at latitude 49 degrees north. A line drawn over the intermediate distance between those points would measure by actual calculation, 1,747 statute miles, would traverse Lake Pontchartrain nearly centrically, cross the Mississippi river a few miles above Natchez, the main Arkansas near Fort Smith, and reach its middle distance between Grand Saline and Solomon's Fork, branches of Kansas river; and thence over Platte river and the numerous higher confluents of Missouri river to its termination in the gorges of the Rocky mountains; course north 15 degrees 14 minutes west. A similar line, in a like angle, with the meridian would reach from southwestern Spain to Warsaw.

We might adduce other comparative views from distances, but deem those given as adequate to answer the present purposes and proceed to comparisons of surface.

In Darby's Geographical Dictionary, under the article Earth, pages 292 and 3, it is shown, that deducting deserts, more or less extensive over parts of all the continents, and frozen tracts, particularly towards the northern extremes of Asia and America, the arable surface admitting any considerable density of population, amounts to only about 31,000,000 of square miles. Reasons are there given, to show conclusively, that this reduction of the habitable land, if in error, the allowance is in excess. In the present case, we adopt it and proceed, making thirty-one millions unit.

Table Comparative of that part of the great central region of North America included in the domain of the United States. Its extent, compared with the whole land area *of the earth, that of the continent of which it forms a part, and that of other sections of the land area of the earth, rejecting minute fractions.*

LAND OF THE EARTH.		PROROPTION.	
The earth, entire surface - - - - -	U. States part of the central basin, 1,700,000 sq. m., and in extent equals	11t6h nearly	197,
Land, Polar region, &c. - - - - - -		40th	67,
Do. reduced for arable - - - - - -		18th	31,
Asia - - - - - - - - - - - - - -		9th	15,
Africa - - - - - - - - - - - - -		6th	11,
New Holland, Australia - - - - - -		4th	4
Europe - - - - - - - - - - - -		1-2	3
North America and Greenland - - -		1-3	8
South America - - - - - - - - -		1-4	6
Europe, Russian - - - - - - - - -		1 and 1-2	1
Europe non-Russian - - - - - - -		1 very nearly	1
United States territory, including Texas, Oregon, &c. - - - - - - - - -		7-10th very n'rly	2
Russian Empire, Europe and Asia, -		4-10th	4
Chinese Empire - - - - - - - - -		1-3	5
Brazilian Empire - - - - - - - -		1-2	3

In national statistics, the amount of population is only one of the cor elements which demand attention. The spread and location of the pe well as their number, demand the most attentive inquiry. When, in 1 census of the people of the United States was first regularly and nationall where did the population exist? In answer, it may be observed that, v an exception of one-tenth, the main spine of the Appalachian mountains l the population. It is safe, therefore, to assume the Atlantic slope, with of 300,000 square miles, and a distributive population of about thirteen pe the square mile, as the space which held, with the exception of about on the whole people of the Union.

Before 1790, scattering settlements had been made on the extreme nortl fountains of Ohio, and some few and far scattered around the borders parts of the Mississippi basin. Tribes of fierce savages stood opposed, destiny of things could not be stayed, and during the decennial period, fro to 1800, these savages were crushed, and settlements greatly extended, a ulation increased, expanding, we may say, into the central basin. It oug here premised that for reasons too obvious to need explanation, Louisi Florida, with Michigan, ought to come into our general view, as they we sequently incorporated into the Union.

By the census of 1800 the subjoined sections had a population of—

Kentucky, - - - - - - - - - - - :
Tennessee, - - - - - - - - - - -
Ohio, - - - - - - - - - - - - -
Indiana, - - - - - - - - - - - - -
Mississippi, - - - - - - - - - - - -
To which add, by supposition, for Western New York, Western Pennsylvania, Western Virginia, Michigan, Florida, and Louisiana, -

Amount in 1800, - - - - - - - - -

Admitting this summary to be correct, and that the aggregate ten year was 300,000, the ratio of increase would be 1.60 for the decennial increase amount for the increase and aggregate population of the central basin United States, at the beginning of this century, may excite suspicion of rather than the contrary. The surface on which this amount resides, or the far greater part, only 300,000 square miles, yet had not a distributive tion of fourteen persons on ten square miles. At the same epoch, New with perhaps 5,000 inhabitants, was the only place in the basin deserv name of a city.

MONTHLY COMMERCIAL SUMMARY.

FINANCES OF NEW YORK AND BOSTON; CONDITION OF BANKS; TRADE OF NEW YORK CANALS FROM 1842—1848; PITTSBURGH CANALS; SPECIE MOVEMENTS AND CIRCULATION; IMPORTS NEW YORK; BANK OF ENGLAND; COTTON MILLS AND HANDS IN MANCHESTER; ENGLISH COTTON TRADE; IMPORTS INTO GREAT BRITAIN 1847; RAILWAY MOVEMENTS IN GREAT BRITIAN; PRICES OF COTTON IN LIVERPOOL 1846—'47; EXPORTS PRODUCE FROM UNITED STATES; RATES OF FREIGHT IN NEW YORK; VESSELS AND TONNAGE OF THE UNITED STATES, ETC.

February.—The aspect of financial affairs, which changed so materially in the month of November, has not, up to this time, assumed a more promising appearance. Money in New York and Boston, as well as in Philadelphia and other cities, has been very scarce and high in price. The pressure has continued severe in New York, but more so in Boston where the want of money appears to be more directly felt than elsewhere, notwithstanding the large and profitable sales of manufactures which New England has made during the past year to the rest of the Union. With the lapse of time, however, and the rigid course of the Banks in relation to Discounts, the liabilities of the mercantile community are becoming much curtailed, as they mature in amounts larger than the new creations of notes, and therefore the demand for money is less, producing apparent ease while the supply is no greater. The continued export of specie has been a sufficient cause for the exercise of the utmost caution on the part of the institutions, after the very exposed condition in which they had incautiously placed themselves, through the neglect of the "signs" from abroad, between August and November. It has resulted from the last years' large exportations, that the country is richer than the cities, that is to say, instead of balances being due New York and the centers of trade, as usual, the Atlantic cities have been more than usual in debt to the country, as thus the New York Banks at the return in November showed bank balances due as follows:

	Due New York Country Banks.	Due Banks in other states.	Total balance due fm N. Y. Banks.
Nov. 1846, - - - - - -	1,504,886	3,649,829	5,154,715
" 1847, - - - - -	2,948,560	6,308,255	9,256,815
Increase, - - - - -	$1,443,674	$2,658,426	$4,102,100

This was a considerable increase of balances, and of the $6,308,255 due by the New York Banks to institutions in other states, a considerable portion was due the South, thus the Merchants' Bank of this city owed the Bank of Mobile, alone, more than $1,000,000. Hence the abundance of bills on the North. The amount due the interior Banks in New York, was double what it was in the previous year, and was the natural result of the enormous deliveries on the canals.

The value of produce delivered on the Hudson, at tide water, for a series of years has been as follows:

	1842.	1843.	1844.	1845.	1846.	1847.
Products of the Forest, .	3,741,059	5,956,474	7,716,082	7,759,596	8,589,291	8,798,373
Animals, ...	4,827,615	6,357,344	7,888,922	9,002,196	10,633,820	12,565,214
Vegetable Food, . . .	10,340,427	11,237,025	12,634,616	17,579,581	22,286,905	41,350,436
Other Agriculture, . . .	494,847	616,660	596,527	630,404	742,093	709,109
Manufactures, ...	1,949,541	2,561,159	3,480,676	6,432,259	4,805,719	6,024,518
Merchandize, ...	55,432	56,224	86,153	88,497	276,872	517,594
Other Articles, ...	1,342,092	1,667,922	2,328,526	3,559,658	3,770,476	3,127,080
Total, ...	$22,751,013	28,453,408	34,640,446	45,432,301	51,105,256	73,092,414

This table gives the immense flow of the western trade through the Erie canal into the Hudson river, and it will be seen that the value has increased nearly 200 per cent since 1842. The principal increase has been in the article of breadstuffs, the value of which has nearly doubled in the past year. The "product of animals," mostly cheese, pork and wool, has also greatly increased in amount. The increase in tonnage of all products coming down, has been 381,964 tons, or 30 per cent; while that of merchandise going up, has been 74,472 tons, or 25 per cent. The descending tonnage represents as alone produce coming down, and the ascending tonnage, merchandise going up. This comparative trade has been as follows:

	1842.	1843.	1844.	1845.	1846.	1847.
Descending Tons, . .	666,696	836,861	1,019,094	1,208,943	1,362,319	1,744,283
Ascending " . . .	123,294	143,595	176,737	195,000	213,795	288,267
Total, . . .	789,990	980,456	1,195,831	1,403,943	1,576,114	2,032,550

The down tonnage increase much faster than the up tonnage, showing the increasing independence of the western country for goods and of credits in their favor with the Atlantic Banks. The commerce of the Pennsylvania line of canals presents similar results. The imports and exports of the leading articles to and from Pittsburgh by the line of canals has been as follows:

IMPORTS AT PITTSBURGH.

	1846.	1847.
Dry Goods, lbs. .	12,651,818	23,201,074
Hardware, " .	10,582,463	14,501,693
Chinaware, " .	4,957,454	5,046,218
Coffee, " .	10,990,933	9,927,605
Groceries, " .	6,933,856	7,833,925
Hats & Shoes, " .	2,049,540	2,690,861
Total, 6 articles,	48,036,084	63,201,396

EXPORTS.

	1846.	1847.
Tobacco, lbs, . .	24,896,742	14,777,089
Hemp, " . .	1,287,886	3,311,692
Lead, " . .	325,965	188,078
Bacon, " . .	21,661,236	12,713,427
Cotton, " . .	1,060,971	1,056,132
Flour, " . .	156,402	297,940
6 articles,	48,972,880	32,346,330

There is a great decline here in Bacon and Tobacco, and the results were similar in relation to those two articles at New Orleans where the year ends two months earlier. The value of produce delivered at New Orleans from the Mississippi, as compared with that delivered at the tide water on the Hudson is as follows:

	1844.	1845.	1846.	1847.
New Orleans, ...	60,094,716	57,199,122	77,193,464	90,033,256
Hudson, ...	34,640,446	45,452,301	51,105,256	73,092,414
Total both places, ...	74,735,162	102,651,423	128,298,720	163,124,670

It has been the case during the last four or five months, that while the receipts of produce have swelled the credits of the country with the Atlantic cities, the state of the foreign markets in relation to bills has been such as to exhaust the commercial capital of the seaboard. Thus while the country draws upon the city for the proceeds of produce, the city is not only unable, through the discredit of bills, to realize from abroad, but must remit specie in payment of imports. By this double process, therefore, money becomes scarce on the seaboard, to say nothing of the movements of the government. For the month of December the export of specie from the port of New York, was $1,788,867, and from Boston, $662,986, making together $2,451,853 from the two ports. The steamer cleared from New York Jan. 1, carried in addition $398,000, and the Siddons packet ship

$100,000, and other vessels took $274,000, making near $800,000. This continued drain, growing out of causes to which we have alluded in former numbers, has forced upon the Banks the utmost circumspection. They held in November $9,000,000 specie, and the last estimates do not now make the sum on hand more than $4,500,000. The pressure is producing its own cure to some extent by checking importations; many orders that had been sent abroad for goods have been suppersed, or countermanded. The business of the port of New York for the month of December, shows some decline in the value of goods received, as compared with last year, as follows:

IMPORTS PORT OF NEW YORK MONTH OF DECEMBER.

	Specie.	Free Goods.	Dutiable.	Total.	Duties.	Average rate of duty.
1845, ...	$78,469	558,185	3,439,991	4,076,645	1,359,896	39¼
1846, ...	61,346	537,496	4,279,813	4,878,655	1,136,327	26½
1847, ...	39,712	111,251	3,316,845	3,467,808	856,576	25½

The stringency of the market here is powerfully aided by returning ease in England, in promoting exports hence, and preventing imports.

The latest accounts from England show a greatly improved condition of the money market, and the position of the Bank, the leading features of which have been as follows:

BANK OF ENGLAND.

	Loans.	Deposites.		Net circulation.	Notes on hand.	Bullion.	Rate of interest.
		private.	public.				
Oct. 23, .	19,467,128	8,588,209	4,766,394	20,318,175	1,547,270	8,312,691	9a9
" 30, .	20,424,897	8,911,442	4,696,032	20,842,412	1,303,103	8,439,674	8a9
Nov. 6, .	19,919,915	8,804,395	4,991,313	20,396,448	2,030,985	8,730,351	8a9
" 27, .	18,531,810	8,238,554	7,729,572	18,963,575	4,986,590	10,532,943	6a7
Dec. 11, .	17,630,931	8,437,376	8,229,759	18,320,905	6,448,780	11,425,176	5½a6

The returns of October 23 marked the turning point of the present panic. Up to that time the failures had been immense and the difficulty of getting money greater than perhaps was ever before experienced. The note of the government to the directors, permitting them to infringe the law of 1844, was then issued; and that allowance itself, although not acted upon, seemed to relieve public feeling, and bullion began to flow in under the influence of paralysed trade and non-payment of bills drawn on England. The numerous failures, suspension of railroads, and stoppage of manufacturing as well as commercial enterprise, reduced the demand for money; and the above returns show the singular fact that, December 11 the loans of the Bank were near £3,000,000 less than October 30, the circulation outstanding £2,520,000, and the bullion in the bank £3,000,000, making together £5,520,000 less money in the hands of the public, and yet the price was reduced 2 1-2*a*3 per cent. These facts show to how great an extent the demand for money must have subsided. The railways had, to a very great extent, suspended operations until money should become cheaper, and, as a consequence, the iron masters had reduced the wages of the workmen, preparatory to reducing the price and "the make." In the manufacturing districts a slight reaction had taken place, as seen in the following figures of the operations in Manchester:

COTTON MILLS AND HANDS IN MANCHESTER.

	Mills.				Hands.			
	full time.	short time.	stopped.	total.	full time.	short time.	out of employ.	total.
September 28	130	23	22	175	25,006	8,339	7,664	41,009
October 5	125	26	24	175	24,317	7,956	8,736	41,009
" 12	112	33	30	175	23,200	8,701	9,108	41,009
" 19	97	48	30	175	18,516	12,198	10,341	41,055
November 16	90	60	23	173	19,145	12,055	7,995	40,995

Since these returns some further resumption of work has taken place, but the activity has not reached that of the last of September, the consumption of cotton has in consequence been much less than last year, and the stock remaining on hand at the close of the year, much larger than it was supposed would have been the case under the short supply. The imports, exports, consumption and stock of cotton from January 1, 1847, to December 17, distinguishing American descriptions, were as follows:

	1846.				1847.			
	Import.	Export.	Cons'pt'n.	Stock.	Import.	Export.	Cons'pt'n	Stock.
United States.......	900,856	90,846	1,175,510	259,340	813,559	60,863	782,490	223,969
Others,............	191,517	1,126	303,700	148,010	246,205	.....	282,930	135,4[illegible]
Total,.......	1,092,373	91,972	1,479,210	407,350	1,059,764	60,863	1,065,420	300,470
Decrease,	-	-	-	-	32,609	31,109	413,790	37,[illegible]

The high prices which the diminished crop of the United States received, brought increased supplies from other quarters, and latterly, when the railroad demand for money pressed so severely on manufacturing industry, the consumption fell. This appears to have been brought about by the manner in which railroad shares were distributed in the community. The calls averaged £1,000,000, or $5,000,000 *weekly*, and the mania had involved all classes of persons, particularly shop keepers. Hence, when money became scarce, and stockholders were compelled to pay up instalments under penalty of forfeit, they did so by *reducing their stock of goods*. They took money from their business to put into railroad shares, hoping for a reaction. Hence, all the stocks of manufactured goods in the shops are supposed to be far less than usual; and this circumstance has affected manufactures as much as the actual decrease in the consumption of goods. With the diminished demand from store keepers, a high price for the raw material and capital very scarce, it was not to be supposed that manufacturing would be continued to the usual extent. As soon, however, as prices of cotton fell, and money became more plenty, operations were renewed. To restore to shop keepers and general business the capital that has been abstracted for railroads, must be a work of time. More particularly that "the lines" will renew the "calls" at the earliest opportunity. The suspension of railway expenditure must have a great influence in checking the consumption of all descriptions of produce, bread included; inasmuch as to their operation was justly ascribed an annual consumption during the past year. As an indication of the extent of this process, we may take, from official sources, a table of the imports of leading articles as given officially for the nine months ending October 10, 1847.

IMPORTS INTO GREAT BRITAIN, FROM JANUARY 10 TO OCTOBER 10.

	1845.	1846.	1847.
Live animals, number, - - - - -	20,593	85,542	172,35
Bacon, cwt., - - - - - - -	4,540	1,513	72,99
Beef, " - - - - - - -	1,841	363	2,57
Butter, " - - - - - - - -	189,056	177,165	243,14
Cheese, " - - - - - - -	183,891	216,191	243,60
Hams, " - - - - - - - -	4,543	8,094	17,33
Pork, " - - - - - - -	32,713	42,685	212,54
Rice, " - - - - - - - -	392,205	541,520	1,046,06
Tallow, " - - - - - - -	501,758	430,221	557,9
Sugar, " - - - - - - - -	4,411,782	4,469,699	6,509,1
Total, nine articles, cwt., -	5,722,329	5,887,651	8,905,4

	1845.	1846.	1847.
Cocoa, lbs.,	3,016,301	1,938,665	9,764,333
Coffee, "	32,166,932	35,099,814	35,769,744
Tea, "	36,825,461	41,432,479	44,912,880
Tobacco, "	10,717,001	19,505,668	11,023,085
Total, four articles, lbs.,	82,725,695	97,976,626	101,470,045
Spirits, gallons,	5,449,456	5,209,648	6,648,769

These are nearly all articles of luxury, when applied to a famine-stricken country, and the increase down to the moment of most severe financial distress was marked and large. The grain and flour imported was as follow:

Indian corn, qrs.,	47,913	451,193	3,240,588
Other grain.	1,121,533	1,898,146	4,204,914
Total grain,	1,169,446	2,349,339	7,445,502
Indian meal, cwt.,		102,932	1,335,464
Flour, "	394,908	2,528,397	6,562,901
Total flour, cwt.,	394,908	2,631,329	7,898,365

The Indian corn and meal was mostly destined for Ireland, but a large portion of the other grain was imported, not so much from the absolutely deficient yield, but through enhanced consumption by reason of railroad expenditure. In the period embraced in this table, viz: from January to October, the amount of railway calls was as follows:

RAILWAY MOVEMENT IN GREAT BRITAIN.

	British.	Foreign.	Total.
Calls payable in January,	£4,457,968	£1,662,000	£6,119,968
" February,	1,454,881	80,000	1,534,881
" March,	3,083,697	502,000	3,585,697
" April,	4,313,439	40,000	4,853,439
" May,	2,965,344	514,000	3,479,344
" June,	2,454,756	1,550,000	4,004,756
" July,	3,891,545	1,032,000	4,926,545
" August,	2,222,839	62,000	2,284,839
" September,	3,325,651	800,000	4,125,874
" October,	3,365,651	92,360	3,458,011
Total,	£31,538.994	£6,334,360	£37,873,351

From the above it will be seen that £6,334,360 belong to foreign railways, and are, therefore, only in part payable by English shareholders, leaving £31,538,994 as the actual amount called for by English railways.

This was rather more than £1,000,000 per week. The £6,334,360 of foreign calls were not to any considerable extent payable in England, and none expended there. For November the calls fell to £2,000,000, and for December still less. This process of railway expenditure, it must always be born in mind, is converting floating into fixed capital—taking capital from shops and manufactures and buying foreign produce for the consumption of 500,000 persons employed in railways. It is true that those persons would eat and drink if not working upon railways, but their labor would then produce an exchangable value to pay for what of foreign produce they consume. The high wages which the competition compelled the lines to pay, enabled the laborers to indulge in tea and coffee, and better food than ordinary. These were imported and paid for with money instead of goods. The effect of this was, that while more tea and coffee, and other edible produce was imported, there was less of the raw materials of manufacture. Those of the latter were as follows:

	1845.	1846.	1847
Indigo, cwt., - - - - - - -	79,395	60,321	58,3
Flax, " - - - - - - - -	1,048,390	744,861	[illegible]
Cotton, " - - - - - - - -	5,495,799	5,786,089	[illegible]
Total cwt., - - - - - - - -	6,623,514	6,191,271	4,913,481
Silk, raw, lb., - - - - - -	2,865,605	3,429,260	3,051,015
" thrown, " - - - - - - -	311,413	293,402	200,715
Wool, " - - - - - -	57,308,477	51,058,209	43,348,386
Total, " - - - - - -	60,485,495	51,780,871	46,600,116

So great has been the diminution in the import of those articles, the manufacture of which into goods for export, forms the basis of British industry. That revulsion and distress should grow out of a perseverance in such a course, is by no means to be regarded as singular. It is to be considered now that the element of this distress, viz: the railroad expenditure has ceased to a very great extent, and, therefore, that the operation of trade will change. There will be far less consumption of food, and, therefore, less import of it, while the reversion of labor to manufacturing employments will revive the demand for raw materials for the production of goods for export, in payment of produce. It is by this process, if at all, that the financial affairs in England will become restored to a sound footing. A great element in a revived prosperity is, doubtless, the low price of raw materials. Thus, New Orleans and Mobile cotton, on December 17, in Liverpool was, as compared with the same date of 1846, as follows:

	Ord.	Mid.	Fair.	Good Fair.	Good.	Choice.
1846, ...	6¼@6¾	7 @7¼	7½@7¾	7¾@8	8¼@8½	9@10
1847, ...	3¾@4¼	4¼@4½	4¾@5	5¼@5½	5¾@6¼	6½@7
Reduction, ...	2½@2½	2¾@2¾	2¾@2¾	2½@2½	2½@2¼	2½@3

This reduction of 33 1-3 per cent. in the raw material, at a time when stocks of goods are very low, enables spinners to buy the raw material at such advantage as to make the investment safe, and it was on this ground that the recent revival of activity in the manufacturing districts was based, rather than on an actually improved demand for goods. On the continent of Europe the railway expenditure continues unchecked. The calls for the French lines for January and February amouted to 100,000,000 francs; say $20,000,000. Throughout Germany the activity was also great. These produce in a lesser degree, because operating on a larger population, an effect similar to the expenditures in Great Britain in an enhanced consumption of produce, thereby diminishing the supply that could be spared for British consumption.

Under all these circumstances, it would seem that for the present year the exports of United States produce to England would be less in magnitude and profit than was the case last year. In the New York market, the decline in cotton has been as follows:

	Ord.	Mid.	Fair.	Fully Fair.	Good Fair.
January, ...	9¾a10	10¼a10½	11¼a11½	11½a11¾	11¾a12
February, ...	12¼a12½	13 a13¼	13¾a14	14 a14¼	14¾a15
March, ...	9¼a 9½	10¼a10½	11¾a12	12¼a12½	12¾a13
April, ...	10¾a11	11¼a11½	12¾a13	13¼a13½	13¾a14
May, ...	11¼a11½	12 a12¼	13¼a13½	14 a14¼	14¼a14½
June, ...	11 a11¼	11¼a11½	13 a13¼	13¼a13½	13¾a14
July, ...	10¼a10½	11 a11¼	12¾a13	13¼a13½	14 a14¼
August, ...	10¼a10½	11¼a11½	13 a13	13¼a13½	13¾a14
September, ...	11¼a11½	12 a12¼	13¼a13½	13¼a13½	13¾a14
October, ...	10¼a10½	11¼a11½	12¼a12½	13 a13¼	13¼a13½
November, ...	8¼a 8½	8¼a 8½	9¼a 9½	9¾a10	10¼a10½
December, ...	6¼a 6½	6¼a 6½	8¼a 8½	8¼a 8½	8¾a 9
January 1, 1848, ...	6¼a 6½	7¼a 7½	8¾a 9	9 a 9¼	9¾a10

The fall in prices was rapid from September, by reason of the difficulty in gotiating bills and the growing money pressure in this market. The posture the market now holds out the prospect that as money becomes easy in the anufacturing districts of England, and the pressure continues here, cotton will more freely forward at gradually improving rates. Last year the exporters of roduce experienced great difficulty in the scarcity of freights, and speculation n very high. At this port they were as follows:

RATES OF FREIGHT IN NEW YORK.

	Cotton, lb.	Flour, lb.	Tobacco, hhd.	Heavy Goods, ton.	Grain, bush.
		s. d. s. d.	*s. s.*	*s. s.*	*s. d. s. d.*
anuary 6, 1847,	3-8*a*7-16	5 *a*5.3	59*a*60	54*a*55	1.6*a*1.7
ebruary 6, 1847,	7-16*a*1-2	6.6*a*7.0	74*a*75	75*a*80	1.11*a*2.1
" 27, 1848,	3-4*a*7-8	8.9*a*9.0	87*a*90	90*a*95	2.3*a*2.6
anuary 10, 1848,	0*a*1-8	1.9*a*2.0	25*a*27	20*a*25	0.6*a*0 7

These figures produce an erroneous fluctuation, which was produced as well by the lessened export as the increased supply of shipping. The large freights of last year stimulated inordinate activity in ship building, and the official reports give the following number and tonnage:

VESSELS AND TONNAGE BUILT ANNUALLY IN THE UNITED STATES.

	Ships.	Brigs.	Schrs.	Sloops and Canal boats.	Steamers.	Total.	Total tons.
1843, . .	58	34	138	173	79	482	63,617
1844, . .	73	47	204	279	163	766	103,537
1845, . .	124	87	322	342	163	1,038	146,018
1846, . .	100	164	576	355	225	1,420	188,203
1847, . .	181	168	686	393	198	1,598	243,732

This increase of tonnage was large, 55,530 tons, and mostly in sea-going ships; hence the supply of freights. The construction of vessels produced a demand in all the materials of which they are composed. The increase of 50,000 tons shipping would require an increased supply of 1,200 tons hemp. The exports of the United States for the year ending June, 1847, as compared with former years, were as follows:

EXPORTS UNITED STATES.

	1844.	1845.	1846.	1847.
Products of the				
Sea, - - - - - - - - -	3,350,501	4,507,124	3,453,398	3,468,032
Forest, - - - - - - - -	5,808,712	6,550,421	6,807,248	5,996,073
Agriculture, - - - - -	79,936,410	75,409,860	78,827,511	129,108,317
Manufactures, - - - - -	8,163,039	10,247,455	10,183,864	9,305,000
Unennumerated, - - - -	1,600,090	1,269,338	1,379,566	1,108,984
Other articles, - - - - -	854,427	1,315,578	1,490,303	1,999,276
Total, - - - - - -	99,715,179	99,299,776	102,141,893	150,637,464

This large exportation was, of course, added to the large freights carried by American vessels the means of casting the balance of trade largely in favor of the United States, and the imports and exports were as follows:

	EXPORTS.				IMPORTS.		
	Domestic Goods	Foreign Goods.	Specie.	Total.	Goods.	Specie.	Total.
1846, . .	101,718,043	7,865,206	3,481,417	113,488,576	117,914,065	3,777,732	121,691,797
1847, . .	150,574,844	6,166,036	1,845,119	158,648,622	122,424,349	24,121,289	146,545,638
Increase, .	48,856,802	....	....	45,160,106	4,510,284	20,343,557	24,853,841
Decrease, .	....	1,699,147	1,536,298	....	....	....	....

The import and export of specie leaves a balance of $22,276,170 added to money in the country. This has been kept in unusual activity through the tions of the government, which has received during the year from all quarter $48,667,826, and disbursed in the same time, $48,226,516. Of this disbursement, a amount equal to one half has gone through the mint into general circulation. It i not probable that by any means so large an amount of specie will be again importe this year, while the wants of the government for army expenditures will b considerable. Last year the amount negotiated was $22,000,000, of whic $18,000,000 was bid for in April, and the aggregate bids amounted to $58,000,00 Of this, a large amount was bid for on speculation by persons who had not t money to invest. This speculative spirit was, however, engendered by the ge erally promising appearance of trade under the large influx of specie. Th year, under more adverse circumstances, the government will require son $20,000,000 before August, and perhaps a much larger sum, inasmuch as that t Treasury notes at the present price form the chief medium of payments into t Customhouse, and diminish the resources of the government to that extent. It to be hoped, however, that from the returning ease in the London money marke confidence may be restored in the credit of English merchants so far as to ma the bills drawn upon them against produce, available; a circumstance whi would restore to the commerce of the Atlantic cities the capital which, under th discredit, has remained in abeyance. If the government can negotiate its dra freely in Mexico for specie, it may prevent sending specie thither; but if tho drafts are taken by English agents and presented in New York for payment, a the proceeds sent to England, the finances of the country are not relieved. (the other hand, if the exchanges are restored to their usual soundness, and t Mexican drafts invested in sterling bills, instead of gold, the effect will be meet the Mexican expenditure with balances due from England for produc Up to this moment, however, there is no return of confidence in British cred and at our latest dates the distrust of all but first class paper was as great as it any time had been, and the future does not promise permanency to the flatteri prospects of recovering from financial disorder there. It may yet result that suspension of the Bank and resort to inconvertible paper money be attempte before the struggle of the railroads for capital shall finally cease.

MISCELLANIES.

I.—BERMUDA.

Most erroneous opinions exist in regard to the Bermudas. Many supp them to be a small collection of low and almost barren rocks, from which sunk reefs push themselves for miles in all directions, requiring the most extraordina caution to be used in approaching them; that the harbors are open roadstea the soil meagre and thin, and that the group was placed where it is, for no oth purpose but to be a terror to mariners.

It is true, that before the erection of the light-house, a vessel was occasiona stranded on the northern reefs; but such disasters must now be of rare occuren and, in running for the islands, no more than ordinary care is required on t part of the navigator. So far from being cold and barren, there are few sp that can be made so productive, or so well reward the labor of the agricultur There are but few tropical productions unsuited to the soil and climate, and of the grains and many of the fruits of the north can be cultivated with succe It is not unusual to see most of the tropical fruits, with tobacco, coffee, cott indigo, oats, Indian corn, vegetables, and a variety of rare medicinal plants, flourishing in the same enclosure. The orange and grape thrive admirably; a were the cedar cherished less, (for it is now allowed to lumber the most fertile portions of the country,) and proper attention bestowed upon fruit, Bermuda could be made one magnificent fruit garden.

The climate is changeable, but subject to no great extremes of heat and cold. In December, January, February, and a part of March, the winds prevail from the west and north, and often blow with great force, accompanied with violent storms of rain. There are many days in those months when the air is cold, damp, and disagreeable, but at no season is there any appearance of frost. In March the air becomes mild, with frequent showers and breezes from the south. In June it is sultry and oppressive; but the mercury rarely rises much above 86 degrees. Long droughts at this season are common, with an occasional deluge of rain. In September the weather again becomes mild and agreeable.

Snakes and venomous reptiles, that usually swarm in tropical countries, are unknown here. Occasionally a centipede or a harmless lizard is seen, but cockroaches, ants, and mosquitoes are sufficiently numerous. There are but few birds; beside the gull, only five that are common—the red bird, ground dove, black bird, blue bird, and a sparrow, named, from its peculiar note, "Chick o' the Village." Occasionally a crow is seen on some remote island, and, after a hard wind, the eave and chimney swallow appear for a day or two. During the autumn storms, large number of plover stop here to rest themselves; but they are hunted with such tenacity, that they soon leave for regions where powder and lead are less plenty. A great variety and abundance of delicious fish are every day exhibited in the markets, and the turtle is common.

The soft, white stone peculiar to the country, which may be quarried from almost any place, is universally used for building. This stone, resembling hard mortar, seems to be easily cut with a common saw. A variety of limestone rock, very close and compact, and sometimes variegated, is also found, which is capable of a high polish. In the numerous caverns along the seaboard are found colored stalagmitic and stalagtitic concretions, which are worked into various ornamental articles called hard-water.

There are numerous springs on the islands, but rain-water is generally used. Almost every dwelling has its stone walk. Often, in the country, the side of a hill is paved with stone slabs, plastered and whitewashed; and from the slides, resembling banks of snow, the water runs into tanks at the foot of the hill.

There are nearly 400 islands in the group, containing about 13,000 square acres. Few of them, however, are important in size, the larger number being mere rocks, coverred with a thin soil, producing only stunted cedars. The island of St. George, about 4 miles in length, lies at the northeast end of the range. Fort Catharine, at the northeast point of this island, is in lat. 32 deg. 24 min. 47 sec., long. 64 des. 37 min. 49 sec. On the south side of St. George is the town and harbor of that name. This harbor is of easy access, completely land-locked, and vessels of 15 feet draugh can enter in safety, Its proximity to the sea, and being at the same time deep, capacious, and secure, renders it the usual place of resort for disabled vessels. For some time a miner has been engaged in removing several reefs at the entrance by submarine blasting, where the passage was not so deep and direct as desired; and an additional appropriation having lately been made for this work, the desired improvements will probably, before another winter, be fully completed. There are substantial stone wharves in this town, commodious warehouses, and upon five wharves are kept every convenience required for heaving out and repairing ships. St. George is a garrison town, and the island is very strongly occupied. The government works and fortifications are all of the first order, extensive, commodious, and substantially built. South of St. George is St. David's Island, being 3 miles in length, its eastern point forming the prominency called St. David's Head. Somerset, about 3, and Ireland Island, about 2 miles in length, lie at the west and northwest of the main land. Ireland forms the extreme northern point of the western coast, and is the naval depot for the station. An extensive breakwater has been constructed there; and for a considerable period the labor of a large convict establishment has been employed in strengthening that important station. Bermuda, or the main land, extends from east to west about 22 miles, nowhere exceeding three miles in width, and in general not more than one. Hamilton, the seat of government and principal port of entry, is situated at the center of Bermuda, on an inlet, which affords a safe and convenient harbor. This harbor is not so accessible, neither can vessels go in there with the some draught of water as into St. George's. Hamilton and St. George have each a population of about 1,400.

The appearance of the country is a continued succession of steep elevations from 50 to 200 feet in height, with small valleys at their bases, where the soil is deep and fertile. The hills are fertile and covered with low cedars. In the valleys they grow large, and some of the bottoms are almost darkened by those trees. The cedar is a favorite wood for ship building. It is fine grained, very heavy, and almost indestructible. For durability and sailing qualities, there are no vessels that excel those built in Bermuda. The roads are excellent; and the houses are so thickly scattered over the country, as to give the whole island the appearance of a continuous village—being built of stone, generally kept perfectly white, and so surrounded with shrubbery and flowers, that they have a neat and very inviting appearance. The scenery is beautiful; and the land is so narrow that a succession of delightful sea-views is presented to the traveller.

There are about 1,800 soldiers stationed on the islands. At Ireland there are three convict hulks, and one at St. George's. The convicts number from twelve to fifteen hundred, and are employed on the fortifications.

Bermuda is divided into nine parishes; and in 1843 the population was a little less than 10,000—about 445 to the square mile. There are 21 churches and chapels—*nearly one for every mile;* 1 semi-weekly and 2 weekly newspapers; about 20 public or free schools, and as many private ones. In 1841 there were 297 births, 57 marriages, and 161 deaths. The number of deaths from all causes is estimated at 1 4-5 per cent. annually. The imports in 1846 amounted to $672,072 70; number of vessels that entered in 1846 was 194; and the number belonging to the colony in that year was 53—3,551 tons, 314 men. Most of the provisions issued to the troops are from England. The inhabitants obtain theirs from the United States. About 80 oxen and as many sheep are a supply for the troops and convicts for six weeks. These animals generally come from New York, and are kept in stalls till slaughtered.

Staple productions in 1846.

Arrow root	$19,755 94
Cedar boats	523 20
Cedar timber	1,005 60
Onions, 397,646 pounds	7,859 68
Palmetto plait	157 44
Potatoes, 10,536 bushels	8,856 96
Whale oil, 869 gallons	623 48
	$38,782 30

Bermuda is completely enclosed by reefs from the southwest round to the north and northeast. At the northeast, the reefs are about five miles from the land; at the north, about ten; at the northwest and west, about seven; and at the southwest, about six miles. North rock, in latitude 32 deg. 30 min. 12 sec. longitude 64 deg. 46 min. 42 sec., is situated at the outer edge of the reef, and is about 20 feet above high-water.

II. CONDITIONS OF SUCCESS IN BUSINESS.

MERCANTILE success, we all know, depends very much upon a sagacious calculation of the probabilities of the future. The young merchant looks to the future for that competence which is the object of his labors; and his hope is realized in proportion as he is skilful in anticipating the phases and wants of that future. The sagacious merchant infers, from certain appearances of the present, that such and such will be the condition and wants of the coming season, and he prepares himself to meet that condition and those wants, and prosperity is the reward of his foresight and care. He judges from information which he has carefully collected, and from appearances which he has watchfully noted, that a certain crop will be short, or a particular description of goods scarce; he estimates the demand and the prices which a short supply will occasion; he takes care, in good season, to obtain the control of as much of the article to be supplied as he can dispose of, and, this done, he can cooly count his gains, weeks or months before they are realized, with as much confidence as if they were already in his hands.

The two principal conditions of success in mercantile calculations appear to , a sound and well informed judgement, and a regulated and reasonable desire gain. The inordinate, grasping anxiety of wealth, which characterizes many n, is, in a large proportion of cases, a passion fatal to their success. It blinds judgement, and misleads it into visionary schemes and ruinous speculations, d an ample experience shows that men of the coolest, most deliberate habits, ien they have once yielded to the passion for wealth, are no longer capable of soning wisely. Of the other qualifications—namely, correct information, as condition of mercantile success—it seems hardly necessary to speak. "Knowl- ge is power," says the great master of English philosophy. Nor less in mer- ntile life than elsewhere is this maxim true. The language of every merchant uld be, "Give us light;" increase and multiply the means of information. hat is capital, energy, enterprise, sagacity, without accurate knowledge, ex- sive information? An ignorant merchant may happen to succeed, even in s day, but every one must see that it is a most improbable peradventure.

There is no one subject in which the whole mercantile community have deeper erest than that of the vast modern increase of the facilities for diffusing and taining full and correct information on every thing pertaining to trade, so that may enjoy its advantages; and no man need hope to compete successfully th his neighbor, who shuts himself out from a participation in these facilities. e time has come when it is no longer in the power of the few to monopolize; d every day tends more and more to equalize the condition and advantages of siness men, and to throw wide open to all the door to wealth, respectability, fluence and honor. Nor is there any necessity for the frequent failures in ercantile life which have distinguished the past. The young merchant who mmences on the broad and sound moral basis of integrity and nice mercantile nor, and who conducts his business with intelligence and judgment, and with- ut undue eagerness and haste to be rich, will generally meet with success, as e will certainly deserve it. It is true this is a day of ardent competition; but is not less true, that it is a day when manly, honorable enterprise buckless on armor under auspices the most cheering and hopes the most encouraging. V. Y. *Mercantile Times.*

III.—MERCANTILE LIBRARY ASSOCIATIONS.

We have, on frequent occasions, referred to these important unions of those gaged in mercantile pursuits. Their influence upon the community has ready been marked; and when they become universal, we shall expect a liberal nd enlightened body of American merchants. Why should mercantile educa- on have ever been neglected? Can learning be misplaced here, or is not its sence a burning reproach?

Within a short time, we have received, with gratification, reports of the Boston d Charleston Associations, which show increasing prosperity. To us, who are solicitous for commercial education to be introduced into our colleges and uni- rsities, these indications cannot but be hailed with pleasure. We make the lowing extracts from the report of the Charleston Society:

Officers—A. O. ANDREWS, *President.* P. J. BARBOT, *Vice President.*

We are gratified to be enabled to announce an increase of one hundred and thirty members. ll no inconsiderable number of our commercial names remain unconnected with us. Shall continue so? Is there an intelligent merchant in Charleston, who feels an interest in the pro- tion of her commercial importance, who recognises the value, nay the absolute necessity, of ding forth her young men, thoroughly furnished, to take their posts, and successfully to bear r parts in the honorable struggle which our city is waging, who will refuse or neglect to give ur Association his name, his countenance, and a small annual pecuniary contribution? We not believe so; and should not cease our exertions until every business man, who avows any pathy with the commercial fortunes of Charleston, is registered upon our roll.

The Board recommend a Chair of Commerce to be connected with the Asso ation, a proposition which, in a somewhat different form, we have long advo- ted, as will be noticed in the preceding numbers of this Review.

The State of Louisiana will have the credit of taking the lead in this movement and of originating the idea; for it is now understood we are to have a CHAIR OF COMMERCE in the new University at New Orleans. There is not another, strictly, that we know of in the world, though the European mail of to-day informs us that the Government of the States forming the Zoll Verein, intend establishing a COMMERCIAL UNIVERSITY at which young men destined to become merchants, manufacturers or commercial lawyers may receive their complete education.

The following extract upon commercial character is worthy to be treasured:

> The profession of the merchant calls for the exercise of no limited faculties—no mean acquirements—no stinted and circumscribed mind; nay, his transactions not unfrequently demand a judgment, sound, discriminating, comprehensive, well-balanced, and severely disciplined—a capacity keen and quick, and a compass of knowledge embracing the wants, habits, resources, products and institutions of civilization itself. Nor does his country fail to recognize, in the accomplished merchant, the possession of qualifications peculiarly fitting him for her highest service. We see his counsel eagerly sought in the cabinet of the statesman, and his own honorably enrolled among the ministers of Government. Our own Republic is full of honorable examples. If we turn our eyes to that great mother empire of modern commerce—Great Britain—what is the position of the man of commerce and his influence there? But a short time since and we beheld one of her merchants bearing the high embassy of his sovereign to our shores, charged with the negociation of a question of vast magnitude, great delicacy and perplexing intricacy. Successfully executing his mission, he has returned, and commerce claims for her distinguished son the enviable reward of having satisfactorily and peaceably adjusted what had, for more than a quarter of a century, baffled the skill and defied the wisdom of astute diplomatists, and well nigh sundered the peaceful relations of two great territories. While in the astounding overthrow of a system heretofore regarded as interwoven with the very texture of British policy, commerce is even now exulting in her rich trophies, and wreathes the name of Richard Cobden with a garland fragrant from the sweetened labors and added comforts of toiling millions. One of the districts of England, sharing most largely in her aristocratic influences, is at this moment represented in the imperial Parliament by an American merchant. And has Charleston no sympathy in these onward movements? At a time like this, when she is putting forth all her energies not to be outstripped in the race of honorable competition with her sister cities—when she is endeavoring to multiply and develope all her industrial and commercial resources—and to render herself a concentrating point, towards which trade and enterprise shall be attracted—shall she be indifferent to the tone—the character—and the training of the young men who must hereafter take their posts as her commercial representatives? The dictates of enlightened interest and lofty patriotism alike forbid it!

BOSTON MERCANTILE ASSOCIATION.

WARREN SAWYER, *President;* THOMAS H. LORD, *Vice President;* JOHN STETSON, *Corresponding Secretary;* JOHN H. ALLEN, *Recorder;* JAMES OTIS, *Treasurer.*

THE following donations have been made to the society, which evince the spirit of Boston. *One Thousand Dollars* each for the following: Hon. Abbott Lawrence, Amos Lawrence, Esq., Wm. Stingis, Esq., John Bryant, Esq., John Plushing, Esq., Wm. Appleton, Hon. Nathan Appleton, Samuel Appleton; John Welles $500, F. C. Lowell $200; for each of the following $100: John A. Lowell, J. A. Edmunds, D. C. Bacon, Horace Gray.

MERCHANT'S MAGAZINE—COMMERCIAL REVIEW.

The following paragraph from the Report of the "Charleston Association" refers in flattering terms to FREEMAN HUNT, Esq., of the "*Merchant's Magazine*," and ourself. So far as we are concerned, we thank the Association with all our heart for its kindness. We have been connected with many of its members in the happiest hours of life—at school, at college, and in the social circle. We look back to those times with lingering regret, and the associations of home which come crowding upon us are many and powerful. God bless our old city and our old friends. They are still foremost in our heart and affections!

"In exercise of the power given them by the Constitution, the Board have unanimously elected, as honorary members, FREEMAN HUNT, Esq., and J. D. B. DEBOW, Esq. These gentlemen are entitled to wide and honorable distinction. The former in originating the "*Merchant's Magazine*," the first successful attempt of its kind in the United States, sustained and conducted as it has been by marked ability; and the latter, a native of our own city, in the laudable spirit

mpted the establishment of the "*Commercial Review of the South and*
d the masterly pen which he has wielded in elucidation of the com-
terests of the South, have richly earned our most grateful acknowledg-
d we trust that this testimonial from our infant institution, the only
n give them, may not prove unwelcome."

THE PUBLISHING BUSINESS.

isiana Magistrate and Parish Officers Guide, 1818.—We are indebted
Norman for a copy of this very *appropos* work, by Judge Olcott and
ord. It contains copious forms and instructions for Justices of the
dministrators, Executors, Clerks, Sheriff's, Constables, Coroners and
men generally. There is much useful information contained in it.
e subjects treated upon are not elaborated enough for the practical At-
lieving, as we do, that a little law is a dangerous thing; yet the forms
linate officers of justice, &c., supply a vacuum long felt by all interested
al profession; and considering the very distracted state of our statutes
ow exist, the volume will be found of great utility. The work was
by the authors, and is in the hands of our neighbor, B. M. Norman.
We trust it will be extensively circulated throughout the State, and
nunerate the enterprising gentlemen connected with it. We are always
to see a Louisiana Book.

or R. S. McCullok's Report to Congress on Sugar.—We have received
l part of this able work through the kindness of our friend, Senator
It is a volume of 300 pages of valuable matter. We design a review
n early day, and shall put our readers in possession of its facts.

re of an exploratory visit to the Consular Cities of China and the Islands
Kong and Chusan, by the Rev. GEO. SMITH. New York: HARPER &
RS., Publishers, 82 Cliff street.
much pleased by the accurate information as to the social condition of
of the Celestial Empire. Nothing can be more interesting than to
the results of a civilization that may be, for aught that can be safely
d, as old as the age of the flood itself. In glancing over the contents of
econd part of the work—unfortunately the first part has not come to
nong the illustrations, a crowd of Chinese Gamblers are moving their
piles in a manner worthy of more Western climes. On the cover is
famous "Junk." If any have not, we urge them to buy this book, and
ething about the land of tea-drinking and opium-smoking.

ds' Colonial Magazine, January 1848: London.—We have on many
referred to this most invaluable publication, conducted by our friend
mmonds, Esq. It has been published regularly every month for the last
e years, and is already a library of colonial information, invaluable to
ker after truth. The able papers which appear upon colonial sugar,
m, etc., give it value with us. So extraordinary is the empire of Eng-
the study of her colonies and provinces carries us into every quarter
be, and we must become familiar with every part.
ould be pleased to exhibit the Colonial Magazine to any persons who
upon us with a view of securing so important a work, and we are as-
the expenditure will be amply repaid.
lowing are some of the leading articles of the back volumes: Cuba,
uinea, New Brunswick, Australia, Sandwich Islands, Antiqua, Van
Land, Bengal, Singapore, Malacca, Canada, Jamaica, Ceylon, Hin-
dia, Barbadoes, Cape of Good Hope, New South Wales, Algeria,
Malta, Java, Porto Rico, Trinidad, Madras, Demarara, Canadian
avana, Manilla, Railroads in India, etc., etc.

Merchant's Magazine, January 1848.—The January number of our
k cotemporary is now on our table. It contains, as usual, a large
f valuable statistical matter, diversified with articles of interest. A

very interesting speculation on the Seat of Government of the United States, is at the head of the list. It shows commendable research on a subject of much practical importance, for the capital is generally the political, social, and literary center of a country. A gentleman by the name of Godek Gardwell, in a communication to the editor, published under the title of "Labor and other capital, the rights of each secured, and the wrongs of both eradicated," proposes to publish a book under the same title, by which he will "show the true and only means by which producers have been and are deprived of their just and natural reward, and point out a practicable remedy for the removal of the evils." This is promising much, but knowing that our contemporary, in other respects a most *practical* and *useful* man, belongs to the new sect of *benevolents*, we fear that his sympathies may have induced him to publish the communication of his correspondent, and therefore doubt the fulfilment of the promise, although endorsed by the editor of the Merchant's Magazine. There is a fine mercantile portrait in this number.

The Western Boatman, a monthly periodical devoted to Steamboat Navigation, by D. EMBREE.

We have glanced hastily over this work, but that glance was sufficient to satisfy us of the great practical importance of it. The leading article, upon "The Rules to Govern Pilots on the Western Waters," evidences a ready pen, a clear head and an intimate acquaintance with the details of the subject, which should command for it an attentive perusal and extended circulation. If, by the adoption of these rules, a single life is preserved, we may well consider that a great object will have been achieved. With how much greater force then must we be impressed with the importance of such regulations as are here suggested, when we reflect on the immense number of lives that are yearly lost by steamboat collisions, without at all regarding in the estimate the immense destruction of property. The law is impotent to restore life. What we require is a preventative; and we believe that by the adoption of these rules and their faithful observance the evil may be in a great measure, if not entirely arrested.

We concur in the recommendations for "The Organization of Societes," as enforced in an article under this head, and heartily commend the work to all interested in Western steamboat navigation.

Bankers' Magazine. J. SMITH HOMANS, Baltimore, January, 1848.—Our friend has, in a short period, produced the best work relating to Finance and Banking in the Union. It should be sustained by every merchant or practical citizen. We know of nothing like it anywhere. His present number contains a list of every bank in the Union, with full particulars of their organization, capital, etc. We were pleased to discover in our travels at the North last summer, how high this publication stood; and regret that it is not more patronised among us here. The editor deserves all success. The National Intelligencer of April 14, 1847, says: "No president, cashier or teller of a bank should be without it." We welcome the publication to our table. *Table of contents:*—"National Finances;" "Legal Miscellany;" "Bank Statistics;" "Gold Mines of Russia;" "Bankruptcy of John Bull;" "Bank of England;" "Money Market;" etc.

Charleston Medical Journal, Vol. III, No. 1. BURGESS, JAMES & PAXTON.—This valuable journal has been long enough before the public to acquire the highest fame. The editors, Drs. Gaillard and De Saussure, occupy prominent positions in the profession. Among the contributions in the number before us is one from our able friend and neighbor Dr. Nott, of Mobile, on the *Yellow Fever* in that city.

The Farmers' Library and Monthly Journal of Agriculture, January, 1848. New York: GREELY & MCELRATH.

No farmer can truly lay claim to that honorable name, who does not join knowledge of principles to the brute labor of the hands. Within fifty years chemistry and geology have risen to be the handmaids of agriculture, while within the same, nay even less, statistical and economic science have raised the torch to guide the free sails of commerce. As the discoveries of the laboratory and the closet are reduced to successful practice, it becomes proper to disseminate among *practical* men thier results. This is done with signal ability by the present work; *whose veteran* editor has devoted himself to the service of agriculture.

THE

MMERCIAL REVIEW.

V. MARCH, 1848. No. 3.

Art. I.—THE SCIENCE OF HISTORY.

on to the History of Philosophy, by VICTOR COUSIN, Professor of Phi-
of the Faculty of Literature of Paris. Translated from the French by
GOTFRIED LINBERG. Boston: HILLIARD, GRAY, LITTELL & WILKINS.

PART III.

second epoch of the history of a people is the substitution of
io to the theological principle; then that which is considered
still continues to exist; but there also exists already some-
at is human; and the hero is, as in the Greek Mythology, so
, the intermedial between heaven and earth. Finally, in the
e, the man goes forth from the hero as the hero went forth
God; and civil society arrives at an independent form. This
man is completely developed and begins to fall into decay;
le ends; a new people with the same nature recommences, and
ugh the same career. The perpetual and necessary returns
three degrees are what Vico has consecrated under the re-
e denomination of the recurrences of history. (*Ricorsi.*)
e nature is common to all nations; and the same nature, being
o the same laws, causes the same phenomena to occur in the
ler." Both these systems are hostile to a law of progress in
an race. With Bossuet, the Church, or Christianity, as ex-
and settled by a Council of Bishops, is the consummation of
s; hence the assumption of the Church's infallibility. As if
se to contradict this arrogant theory, almost at the same mo-
t Bossuet was composing this system, the religious reformers
omposing and scattering abroad the elements he had collected
into a systematic plan, to exist through all future ages as a
l monument of the grandeur, the supremacy, and the infalli-
the order he represented, and which has absorbed and smoth-
hin its bosom all the other elements of civil society. This
ation" was nothing more than a "declaration of rights" on
of humanity—it was one of those visible and apparently sud-
les which humanity now and then makes in a forward direct-

ion; a stride which cannot be taken by a power so huge without shaking a little the earth and agitating the sluggish waters that lie slumbering upon its surface, and which in fact require an awaking up occasionally to prevent stagnation. It was one of those ventriloqual-like sounds which ever and anon proceed from the mysterious power behind the throne, which is greater than the throne," and which, while all men hear, are in doubt whence it comes, whether from heaven or from tophet; but indeed it is a voice by no means equivocal, although often counterfeited; and when it does speak it utters no Delphic Oracles of double meaning, or issues commands which the power whence they proceed, is impotent to enforce. On this occasion it was the true voice of humanity, which is beyond the Church, above the Church, superior to the Church and to all other human institutions. So long as the Church subserved the interests of humanity, it was tolerated, encouraged, employed—it was crowned "lord of all;" but when, in the pride of power not its own, but which it impiously mistook for its own, it undertook to chain humanity to its car, it was itself emasculated, dethroned, and assigned a subordinate place in the councils of humanity. Humanity is doubtless dependent upon institutions; it progresses by means of institutions; they are the agents it employs to effect its progress; but institutions are temporary, while humanity is more enduring and outgrows institutions as a child outgrows its baby-clothes; for humanity cannot remain stationary any more than the religion of an epoch can be progressive; for a religion can advance only on condition of metamorphosing and destroying itself, and that is what constitutes a new epoch; christianity, for example, is founded upon the ruins of the old religions of the world, and has given its name to the present era. Those ancient religions were the necessary antecedants of christianity; they prepared the way for the new religion; and it is upon their ruins as a basis, a solid substratum, that christianity rests; but whether christianity is destined to be the last and final expression of the religious element of humanity, is a problem which depends upon the future for its solution, and with which we will not presume to meddle. So much for Bossuet's system in so far as it is opposed to a principle of progress inherent in humanity. If Bossuet has failed to reproduce in his universal history the principle in the constitution of humanity which is continually impelling it onward with a steady progress, beyond the range of institutions and in despite of them, Vico has no less done the same thing. His system being founded upon what he calls the "common nature of nations," assigns to each and every nation precisely the same natural laws, the same phenomena, the same order in their occurrence and recurrence, and the same destiny. According to this doctrine, all nations are nothing more than duplicates of each other; and humanity is busied only in repeating itself continually in the life of every nation that inhabits the earth. If this were true, then humanity would be all represented in one nation; there would be no use for any but one nation; it would be all humanity perfected in one nation; the production of a single nation would be the beginning and consummation of the scheme of human existence; the reproduction of subsequent ages would be nothing but humanity revolving continually upon itself; humanity having been

eveloped and perfected in the life of a single nation, there could
Progress beyond the highest point reached therein. At this
en would soon learn by heart all that is contained in the life of
e; they would weary of witnessing the repetition of the same
ver and ever again; there would be no stimulus, no inducement
ion, for a nation would know beforehand, from what had pre-
, all it had to expect in the future; life itself would be a farce,
leath a useless phenomena. In condemning all nations to plod
tonously around his prescribed circle, Vico was unmindful that
is a *history of humanity* which is above nations, which includes
s, which survives them, and is benefitted and promoted by their
"The miracle in the constitution of humanity is, that in each
revolutions it finds in the corruption and decay of its former
ion the elements of that renovation which will preserve it."
y is the true phœnix which springs regenerated from the ashes
parent. Death is indeed the parent of life, vigor, and growth.
leath of the individual is the catholicon of the nation; the
ction of the nation is the growth of humanity. Both these
nena, that is, the mortality of man and the destruction of
s, are necessary for the progress of humanity as manifested on

In the series of events, expressing the evolution of humanity,
have been no experiments, or failures—all have been develop-
results, fruits. Every movement of mankind has been in a
d direction—essentially and necessarily progressive—never
rd—for there is no retrograde motion in history. Nothing
s ever been evolved by the action of humanity, in all time and
and that is necessary to the ultimate growth and complete de-
ment of the race, has ever been lost, but all have been preserved
ntinued in never-ceasing action, connecting in one unbroken
he past, the present, and the future. There have been retro-
ns and declensions in individual nations, just as there is decay
ath among individual men or individual any thing else; the
owever, survives the individual and is advanced by his death.
r men nor nations can take with them to the grave that which
roduced while on the earth. Every man and every nation has
on to perform. With the performance of that mission ceases
ther necessity for their present existence. They and their gen-
go hence, and are succeeded by others who begin where they
. Thus each generation is a term in an infinite series, in which
ceeding term is necessarily contained, *plus*, a certain increment
ing of the impetus imparted to it by the generation that has
t the stage. Eras in the world's history are important only for
as or principles that have been elaborated therein, and which
ught forth or translated into results. These results become so
actors; each preceding factor being retained in the general sum
e that succeed. Thus every man, every nation, every age, and
poch, has some idea to translate. The aggregate of these ideas,
be translated in any given age, constitutes *the spirit of that*
hich is expressed by its *institutions*, such as government, laws,
rch, standing armies, commerce, &c. From these institutions
s evolved a spirit which survives the institutions themselves, and

is placed as an additional factor with those that preceded it; and the whole constitutes an element for a successor to *start from* and *improve*. By this arrangement we behold provision made for the infinite progress of the mind; we behold established the perpetuity, the eternity, as it were, of the human mind through the physical changes of individual life and death.

Vico was the first historical writer who denied the personality or individuality of greatness; that is, he took from "illustrious personages in history their personal greatness, in order to give it back to humanity itself, to the time, to the century in which these persons made their appearance." Homer, for instance, he considers as a kind of mythe, a mere symbol of his century; or that, if he really did exist, all the works of the people of the century which he represents in history, have been added to his own, and placed to his account. It is the same with regard to all other eminent individuals in history. This singular idea has been adopted by Cousin in the work we are now reviewing, and forms a prominent feature of his philosophy of history, as we shall hereafter see. So much, then, for Bossuet and Vico. The vices of their respective systems are so apparent as almost to sink them beneath the dignity of criticism. We have only mentioned their works in order to mark the first feeble and tottering steps that were made by the genius of history towards that more complete development it is beginning to attain in our own day.

The movement of science is always and necessarily from decomposition to recomposition. The next historian of humanity is Herder, who hails from Germany. Bossuet and Vico, in their respective histories, had decomposed the elements of humanity. Herder recomposes them. The great work of Herder, therefore, includes the two elements which had been so exclusively aggrandized by his predecessors, and includes also other elements which they had suppressed or overlooked. The fine arts, for instance, is one of the eliments of humanity. Herder himself was an elegant and distinguished poet. Hence, in his work, all that relate to arts, poetry and literature, are treated in a masterly manner; and industry, commerce, and even philosophy, find appropriate places there. Since Herder, no one, we believe, has attempted an universal history of humanity upon philosophical principles. About twenty years ago Frederick Von Schlegel published a series of lectures, which he delivered at Vienna, under the title of "Philosophy of History;" and more recently Michellet has published a work, which he styles "Introduction to Universal History," in which he has reproduced mainly some of the leading principles of Vico, whose great work (*Nova Scienza*) he had just previously translated into the French language. Though valuable for the rules and suggestions which they contain, yet neither of these works, that is, Schlegel's nor Michellet's, can rank as histories.

If science necessarily advances from decomposition to recomposition, it is also no less necessary that it should return again to decomposition in order to make another step forward. Hence, all the elements recomposed and combined within the frame of Herder's "Outlines," have subsequently been disengaged from each other, and have been treated seperately in a much more ample and elaborate

han was possible in a combined whole. Having been thus
ed in order to be amplified, their recomposition must be
by an agency very different from that employed by Herder,
description of mind very different from his; for it must be-
red that Herder had cultivated polite literature more than
y—that he was in fact a poet and not a philosopher—hence
liar character of his work. From this it will be perceived
next agent to be employed in reconstructing into a system-
c the different elements of history, which had been collected
er, and which have since been detached in order that the
uld be more fully developed, elaborated and amplified, must
ly *philosophical* agent; and the next historian of humanity
refore, necessarily be a philosopher.

oint in our short and rapid review of the rise and progress of
sophy of history, brings us exactly back to Tennemann, and
the philosophy of history with the philosophy of spiritualism,
Tennemann was the historian. In effect it is this philosophy
alism which suggests a new plan upon which to reconstruct
sal history of humanity. "By indicating the general ideas
ve been predominant in the different epochs, and by express-
in the forms properly belonging to the science of which he
e history, namely, to metaphysics, Tennemann has prepared
for that superior point of view which beholds in history no-
ideas, their succession, their conflict, and, in spite of apparent
their regular developement; and which consequently regards
s a real system, and a true and entire philosophy." This
n has been fully adopted by Cousin, in the work now before
ndeed, forms the basis of his philosophy of history, as will
be seen in the sequel.

t, the philosophy of spiritualism or idealism carries itself into
y of humanity, just as it had previously impressed itself upon
ner department of human affairs. This truly was a last and
corollary from its premises, and, indeed, it was a last and
able condition of its existence. Having thus fulfilled all the
s requisite to constitute it a complete system of philosophy,
en completely developed, having given to the world all that
ained in it and all of which it was capable—in fine, having
l its mission, and there being nothing left and nothing more
for it to do, spiritualism needs must perish in order to give
more capacious philosophy which will succeed it, and which
n where it left off. But how does it perish? Being itself
e decomposed elements of Cartesianism, it loses its separate,
dependent, individual existence by entering into a new and
prehensive recomposition along with sensualism and all the
lusive elements of philosophy that, for near two centuries
been maturing in Europe. It is precisely this recomposi-
h our author attempts, or at least foreshadows, under the
eclecticism. It is to be hoped that we have now a clear and
knowledge of this vexed and enigmatical phrase, as well as
ll more difficult philosophy which it was designed to embrace.
we have arrived at this knowledge by a circuitous and per-

haps, a somewhat tedious route; yet, as some recompense for our toil, we have picked up by the way pretty much all the material of which our author's system is composed. It now only remains to see the use he makes of this material, in so far as concerns its ability as an agent to construct history into a pure science. This enquiry will form the subject of our labors.

M. Cousin and eclecticism may, therefore, be said to be the lost word, the last grand product, and the highest and most perfect expression, not only of the philosophy of the eighteenth and nineteenth centuries, but of all antecedent time. Where then is to be found a more proper witness to interrogate, or one more competent to enlighten us on a topic that has so long been forcing itself upon the attention of mankind with a pertinacity that defies all obstacles, and that disregards rebukes, ridicule, persecution, scorn, contumely, and even silent contempt and the most withering neglect; crushed to-day, it resurrects to-morrow; in despite of all difficulties attending its solution, again and again it comes up in the human heart and challenges investigation. It is in vain, therefore, that we try to exrocise a spirit so unquiet. Like the ghost of Banquo, it will not down. Assuredly it has a mission to perform, a tale to unfold, or it would not so walk the earth. Whether, then, it be "a spirit of health, or goblin damn'd"—whether it bring with it "airs from heaven, or blasts from hell"—"be its intents wicked, or charitable"—let us approach it, speak to it, and listen to its revelations; for to this complexion we must come at last

The work now before us is a series of lectures, delivered and published in Paris in 1828, translated for the American public by Mr. Linberg, and published in Boston in 1832. We know of no other of M. Cousin's writings that has been translated into our language—the more is the pity, and shame, too, for us, that such is the fact; for he is undoubtedly the greatest dialectitian, the ablest master of his language, and the most erudite scholar that has lived in modern times. The mind of M. Cousin, during his philosophical career, passed through many changes and modifications. He began as a disciple of the Scotish school of Reid and Stewart, under the tutilage of his old friend and master M. Reger Collard; thence he passed to the German school of Kant. He has also acknowledged alternately the influence of Fichte, Schelling, Hegel, as well as of Proclus and Descartes, until eventually he sat up for himself, and, as already stated, founded a school of his own, compounded of all the others. These lectures, besides being a general introduction to the universal history of philosophy, contain an outline, a summary but complete and luminous exposition of all the leading principles of this school, as well as of all the other different schools of philosophy that have alternately prevailed in Europe during the last two centuries. It is our design, however, at present, to introduce this philosophy to the American public only so far as its principles are applicable to the "New Science" which it claims to verify, if, indeed, not to have created, and which it has selected as one of the tests or counter proofs of its own verification; that is, to look a little way into the history of humanity by the light of philosophy. The utmost we expect, or hope to do, is to excite in our countrymen a spirit of enquiry on the subject. If, therefore, anything we may say should

e so fortunate as to awake in the mind of a single reader a desire to
now more, it will be, if not enough, a great deal achieved.

We now come to an analysis and examination of the internal struc-
ure of Cousin's peculiar system. In the translator's preface we are
old that "M. Cousin considers history as a complete and systemati-
ally arranged account of the successive and simultaneous develop-
ments of all the elements which constitute humanity; and thus as the
most complete and luminous philosophy of the human mind. And,
s the mind of a human individual is the only type and representative
which presents to human understanding a visible image of humanity
n general; and as the elements which constitute humanity in one
ndividual must be the same as those which constitute humanity in
great bodies of human individuals; he thinks it necessary first to ex-
amine the development of these elements, as they present themselves
o us in our own conciousness; in order to discover the principles, ac-
ording to which we are to examine the development of humanity, on
a more extensive scale, in the process of civilisation which it is the
province of history to represent. He, therefore, enters into a most
ngenious analysis of the elements of human thought, which he reduces
o three fundamental elements, without which no object of perception
an be given to human understanding; and which are, therefore, dis-
overable in all objects of our perception, in our ideas of ourselves, of
he human race, of nature, of God, and of all things."

This is a succinct and very accurate statement of Cousin's mode of
onducting his subject. For instance; he demonstrates, by what he
alls *psychological* analysis, that philosophy is one of the specific, cer-
ain, permanent, and indestructible demands of the human character.
his *psychological* method deals only with the facts of individual
hought, which are complicated, fugitive, obscure, and so deep within
he interiors of the mind, that they are almost beyond the reach of
pprehension. History is the visible image of the aggregate mind of
he whole human race, of which the individual is an epitome, present-
g to the eye of the philosopher, on an enlarged scale, and in well
fined, material, visible forms, those ideal facts which lie concealed
mere abstractions within the bosom of human nature. He, there-
re, strengthens his *psychological* demonstrations by a counter demon-
ration, which he calls *historical* analysis; the latter being, not a
ore certain, but a more luminous method; which, without controling
e former, confirms it. He also undertakes to demonstrate by history,
at philosophy, being a want inherent in the human character, has
ver been absent from any epoch of humanity, but has accompanied
e whole course of its development—that the development of the
man race in space and time, is history—that it is a *development*,
cause there is and can be no history of that which does not develope
elf. We must here, by way of parenthesis, object to this latter
claration; not that the conclusion or sequence is illogical; but be-
use the assertion is made without proof; in short, because the premis
false; for the life of man, or the life of humanity is *not* a develop-
ent, but a growth; between which two processes there is a wide dif-
rence. Development is simply the unfolding of what was originally
thin; whereas, growth is an accretion which "is effected by assimi-

lating, according to an internal law, or vital process, appropriate food from without." We merely make a note of this for the present, in order to direct the attention of the reader to it, designing to make a further use of it hereafter in a more appropriate place. M. Cousin thence proceeds to show that the idea implied by that of development is the idea of progress—that all history, then, implies a development, a progressive march—that the progressive development of the human race in history is civilization—that, if human nature manifests itself in the individual, it manifests itself also in the species, the one being simply and only on a larger scale than the other—that as many elements as there are in human nature, and in the individual; as many as there are in the species; so many, do history and civilization develope. Therefore, he concludes, as human nature is the matter and the basis of history, so history is again the judge of human nature: and historical analysis is the counter proof of phychological analysis. "In a word, the certainty of interior observation precedes that of history; but the certainty of history, is a guarantee of the former. History is a representation of human nature on a grand scale: and that which is scarcely perceptible in consciousness, shines forth in history, in luminous characters." He, therefore, in the first place, interrogates consciousness and wrings from it the confession that philosophy has a real and incontestible existence there; he then subjects history to the question, and professes to have obtained thence the acknowledgment that philosophy possesses also an historical existence: for if philosophy, after the lapse of three or four thousand years, has not yet existed, he concludes there is some danger that it may never exist.

Here, then, is the use which M. Cousin, in the book before us, makes of history. While he employs history as a counter proof of the existence of philosophy, he, at the same time, employs philosophy as an architect to reconstruct history into a systematic plan, a positive science; and makes the two advance *pari passu*, in parallel lines, from the earliest period of the human race, until finally, in eclecticism, they meet to explain, verify and illustrate each other. How well he has succeeded in this difficult enterprise will appear in the sequel. In the outset, however, we beg leave to state our conviction, that M. Cousin, in the prosecution of his design, has reproduced one of those mischievous consequences to which history, in its present imperfect and unorganized condition, is so unavoidably subjected. If, for the selfish purpose of making out his case, he shall be found to have falsified, in the slightest degree, the readings of history, or to have tortured from its testimony a meaning which it will not legitimately bear, or which arrays its facts in contradictory attitudes towards each other, additional proof will thereby be afforded how urgent is the necessity for arraging those facts into a scientific classification, whose teachings shall be as infallible as are the teachings of any other of the positive sciences.

Though these lectures, by the title affixed to them, profess to be only an "Introduction to the History of Philosophy," yet in the above short and imperfect sketch, we have endeavored to show the nature of the service human history has been made to render to the subject, and also the nature of the service M. Cousin's Eclectic Philosophy has

made to render to human history. By this method the two are
ight, not only into immediate juxtaposition, but into mutual de-
dence upon each other, and the necessity is thereby imposed of
ually discussing each by the light of each.

s we have seen, the method which presides over the whole course
M. Cousin's instruction, is of a compound character—it is the
ntity of psychological and historical analysis, which may be summed
s follows: Empiricism, by itself, can conduct us only to a knowl-
e of what has already occurred, without explaining why it occurred,
ccurred thus and there, and not *otherwise* or *elsewhere*. On the
er hand, the speculative method may lead us into a false system,
ch will again lead us to a false view of history. The union of the
methods will give us not only facts, but their relations as well, and
n their relations extract their laws. Psychology begins *a priori;*
torical analysis, by way of counterpoise, comes in and advances to
same end by the method *a posteriori*. The one seeks the primary
essential elements of humanity, deriving thence their funda-
ntal relations, and from these the laws of their development and the
er of succession; and finally, history, philosophically read, confirms
ejects the results thus obtained. Having premised thus much, we
now enquire, what are these essential elements of humanity?
at are these fundamental wants of the spirit of man? That is,
t are those general ideas which preside over and govern human
vity?

r. Cousin has assigned to human nature five fundamental wants
ssential elements; that is, in other words, five general ideas which
trol the development of humanity in time and space. They are
se:—1. The idea of the *useful;* 2. The idea of the *just;* 3. The
of the *beautiful;* 4, The idea of the *holy* and *divine;* 5, and
ly, and superior to all, the idea of the *true*.

nd now it becomes necessary to leave our author for a short space,
rder to give the general reader a clear conception of this part of
subject. To do this, he must be inducted into some of the myste-
of philosophy; and especially he must be taught the philosophical
ification of the term "IDEA," of which so much use is made in these
ures. This knowledge, Cousin has not thought proper to commu-
te in a manner sufficiently clear to the uninitiated; nor, indeed,
it properly come within the sphere of his instructions to do so,
much as he was presumed to be addressing an audience composed
cholars and students who had already made sufficient advancement
the arcana of philosophy to understand at least the import of the
nicalities he employed. Such a supposition, however, will in no
hold good in respect to the mass of readers in this country,
are presumed to have been more busied with the mysteries of
ars and cents than with the mysteries of French and German phi-
phies. In giving this explanation, we will avoid entirely the
enclatures employed by philosophers, such as the "me" and the
t me," "objective" and "subjective," "impersonality," "spontan-
," and many other phrases which we opine would be "all Greek"
ost of our readers. Instead of using exclusively the term "IDEA,"
Cousin does, we will vary it occasionally with that of "*spirit*,

which, in this connection, means precisely the same thing, though people ordinarily are very far from attaching precisely the same meaning to the two words; in science, however, this branch of philosophy is called indiscriminately "idealism" and "spiritualism." The reader will here please to remember what we said concerning Tennemann, who was the first to conceive of treating history after this method, that is, from the point of view afforded by the philosophy of "idealism or "spiritualism," and who, therefore, saw in history nothing but *ideas*, their succession, their conflict, and, in spite of apparent disorder, their regular development. This method, as we have already remarked, is adopted by Cousin to its fullest extent, as we shall presently see; and as he is now about to unfold it in the most ample manner, we have deemed it necessary to preface the exposition with the following introductory remarks, which will the better enable the reader to go with him and to appreciate his *quasi* demonstrations.

According to the continental philosophy, the common and vulgar belief that spirit and matter are two distinct and independent existences is a common and vulgar error; and the opinion that spirit and matter are one and the same thing, or *identical*, is equally erroneous. Spirit is not matter refined, etherialized or sublimated, but matter is spirit actualized. Spirit and matter are inseparable, but not identical. We seize spirit or the ideal, only in the actual; that is, we can know spirit only as it is actualized in its phenomena. We can have no conception whatever of spirit except through matter, by means of which it lives and manifests itself. And matter in turn, must necessarily have a spiritual basis, for without spirit there would be nothing to be actualized. All matter, in every conceivable form and shape, are but the phenomena or the *acts* of idea or spirit. The idea must precede the act, and every act must have its basis in idea. Man, for instance, never acts until he thinks, and his acts are the realizations of his ideas. We can have no knowledge of man's ideas except through his acts; so we can have no conception of spirit except through matter, which are its acts. Man, that is, the individual man, is the actualization of the *genus*, humanity, which is the ideal, and this ideal dwells in the Infinite Mind, and was there created in idea, in thought, in spirit, merely in *potentia* as it were, before it was actualized into individual men and women. And this is true of all other material forms and substances. The *genera* or kinds existed, or were created in the Infinite Reason, before they were formed *in actu*, that is, before they were actualized in individual men, or individual plants, or individual any thing else.

[TO BE CONTINUED.]

Art. II.—DEER AND DEER HUNTING IN LOUISIANA.

In Louisiana, and, indeed, in the United States, so far as we are informed, there is but one species of the deer tribe.

The great Naturalist, Buffon, is very unsatisfactory in relation to the deer of Louisiana. He appears to have had no information on this interesting subject, ercept what was occasionally derived from a few New Orleans correspondents. Sometimes he styles our deer, the

"Fallow Deer," but his most common term is the "Roe Bucks of Louisiana." He remarks, "there are too species in America — the red, which is the largest, and brown, which has a white spot behind, very common for example in Louisiana, and larger than those in France. "The flesh of the brown roe buck is better than that of the red. No good roe bucks but those that inhabit dry and elevated countries."

It is very evident that this celebrated Naturalist was misinformed by his New Orleans correspondents; receiving from one a description of our deer when "in the red," and from another a description of the same animal when "in the blue," to use the phraseology of hunters. Indeed, the appearance of our deer in summer and winter is so very different, that his mistake in supposing two varieties in Louisiana is easily accounted for.

The American Naturalist, Godman, of Philadelphia, gives the most correct description of Louisiana deer that we have seen; but, like every Naturalist we have examined, he is silent in regard to their habits.

Cervus Virginianus is the technical name by which the Deer inhabiting the United States is now known to Naturalists; taking its name at that period of history when a great portion of our territory, embracing many of the largest States of the Union, was styled Virginia. The deer of the United States has also occasionally been styled, *Cerf de la Louisiane.*

This animal is so generally known that we conceive a minute description entirely unnecessary. Suffice it to say, that the deer is of a red color in summer, and of a color that is styled "blue" in winter, although the color in winter is a peculiar one. There are some few exceptions to these colors, which may, however, be looked upon as *lusus naturæ.* There is a pet deer about twenty miles distant from us, white, with red spots. There was a white buck in our vicinity for two or three years, as white as snow, which, although often seen and hunted, was never killed that we have heard.

The fawns are red, with small white spots on their sides like little stars. These spots are lost when they assume their winter color during the autumnal season. The horns of deer are of annual growth, covered with skin and hair, and very vascular. During the spring and early part of summer they are about the consistency of a beet or carrot, and are full of sensibility. Towards the latter part of summer they become hard and lose this sensibility. The skin that covers them becomes dry, and at this season the bucks rub their horns against little sapplings to wear off the dead skin, and rub so hard as to remove the bark itself. The size of the horn and the number of its prongs or antlers are not correct indications of the size or age of a buck, (common opinion to the contrary notwithstanding.) A yearling buck has, however, but one straight prong, which, occasionally, at that age commences to fork at the top. Hence bucks of this age are usually styled "spike bucks," from the horns somewhat resembling a large nail. After a Deer is three or four years old, or rather after he has become an aged buck, the horns are not an indication of his size or age. The largest buck we ever killed had a medium sized pair of horns; the left horn had but five antlers; the right the same number with the exception that its second prong had a prong about three inches in length. The age of a deer may be more correctly determined by his teeth, like an aged sheep or horse; by the broad set or shape of his body and by the grey hairs on his forehead, for like man the autumn of his life is besprinkled with the snowy locks of approaching old age.

The antlers of their horns frequently approach each other after having diverged. In fighting they get each others horns entangled so fast that they cannot seperate them. The combatants thus starve and sometimes drown each other, if the combat should commence on the margin of a shallow lake or pond. A case of this kind happened in our neighborhood.

The size of a deer differs very much in the middle and southern states. Dr. Godman mentions one hundred and thirteen pounds as the weight of a large deer. This will probably do as an average weight for large bucks in the northern and middle states, but large bucks in the Mississippi swamp will weigh two hundred and seventy-five pounds. Several old bucks have been killed in our immediate neighborhood whose quarters, when butchered, weighed from one hundred and seventy-five pounds to one hundred and ninety pounds. We killed, in November last, a buck that weighed two hundred and thirty-two and a half pounds, on patent balances, after having lost a great quantity of blood. On the next day we killled one as tall and as lengthy, that weighed but one hundred and ten pounds. The former was a very fat aged buck, the latter was a buck of two or three years and his body had not received that heavy set and wide spread that the full maturity of age bestows on man as well as beasts.

During the rooting season the necks of the old bucks swell up to about double their common size, and subside again at the close of that period.

HABITS.—During the rooting season, generally termed the running season by hunters, in consequence of the deer being almost continually in motion, the bucks are in the habit of scraping. This season in Louisiana is included in the months of November and December. A this time the bucks have their particular scraping places, and it is said that the doe also scrapes at these places, but of this we are not pre pared to say. This scratching or scraping of the earth is done with their fore feet, and the scraping place is of a circular form. At thi place there is invariably a small sapling or limb of a tree which th bucks root or twist with their horns. They scrape during the night and sometimes a little after day light. They may be sometimes sho by watching these places very early in the morning, if it be still, tha is to say, if there is no breeze and if other circumstances are favorable This scratching by the bucks is equivalent to the biting of the bark o trees by the bear, the bellowing and scraping of the earth by the bul the gobbling of the turkey, and the crowing of the cock; a challeng to combat and an indication of the excitement prevalent alike through the whole animal creation during the love season.

During the rooting or running season, the bucks and does are almos continually in motion, and at this period they are not governed b their usual habits, particularly in regard to the time of grazing an browsing. With the exception of this season, they graze at night, if the nights are not very dark, and continue grazing until a little after sun rise, when they lie down for the rest of the day, till about sun set in hot weather. However, they drink about the middle of the day. When the nights are very dark they lie down during a part of it, and feed much later in the morning. During such times we have approached within sixty, feet and shot them before they rose, in our fire hunting excursions.

Their food consists of grasses, mosses, weeds; and they brouse on the tender buds of various kinds of shrubs and trees. Indeed, pet deer are very destructive to the buds of almost all kinds of shrubbery. They are fond of most kinds of mast, and are very particularly fond of the striped acorn, (a small oval acorn having stripes lengthwise) and this is their favorite food of the whole acorn family. They may generally be found, late in the fall and early part of winter, wherever this kind of .mast abounds. They are also fond of young pumpkins, and are quite mischievous when they take a fancy to a pumpkin field. They are also fond of the top bud of the cotton plant. Deer usually prefer thickets, where they can conceal themselves in the day. There are two exceptions to this general rule, when flies and musquitoes are very troublesome, they may be frequently found lying down or standing in open places, where the sun can shine, for they are aware that these insects cannot well bear the hot rays of the sun. They also lie down in such places on the south side of hills, at the season when their horns are becoming hard, the hunters say to dry their horns.

During their grazing time, which is generally, but not always, at night, they come out into the open woods. Wherever mast abounds, or wherever there is an abundance of food that they fancy, not unfrequently in cultivated fields, near to their range, they usually lie down in thickets of cane, bushes, prairie, grass, palmetto, or green briars, and when aroused, by man or dogs, they generally keep the thickets, unless they are hard pressed, when they occasionally run on open ground, but usually to the nearest thicket, and very generally different deer running over the same ground, make the same run, hence when hunters have driven the same neighborhood a few times, they know where the deer will make their run, and station themselves accordingly. These places are termed "STANDS." Deer when pursued in the day time do not pass by the same paths they do at night, when they are unmolested, because, as we have already remarked, they range more in open ground then.

If a deer is running, and not pressed, and hears a noise, unless a man is discovered or scented close, he will generally stop in a thicket, or on its margin, if one is hard by; if not he will stop by the side of a large tree if one be near, and we have often thought that they had a peculiar nack of getting the tree between us. They appear to be conscious that a large tree will protect one side of them. It is a common thing for still hunters, when a deer has been suddenly bounced up. or when one happens to be passing near, to bleat to it, imitating the noise of a fawn or doe. As a general remark, a deer will stop where his run happens to cross a road or pathway, that is much traveled. except when he is hard pressed by the dogs, and even under these circumstances he will frequently stop. Sometimes in the middle of the road, but generally a little before he arrives at the road, particularly if there happens to be any bush, brush, or thicket of any kind there, or indeed, a tree or two. If it has been run hard, and the dogs are far behind and out of hearing, it will approach the road very cautiously, and the hunter must be very circumspect, particularly if the current of the air happens to pass from the stander into the drive, otherwise the deer will turn back and pass out of the drive at another stand, or at an unusual place. Their sense of smelling is remarkably acute, and a person unacquainted with deer, would scarcely believe that a deer could "wind" a man so far.

During the spring season, after the flies and musquitoes have become troublesome, the deer frequent the shallow lakes and ponds during the day time, as a retreat from the annoyance of these insects. Sometimes they lie on little elevations, caused by the roots of trees, and not unfrequently in the water without any part of them visible except the head and neck, and these they occasionally plunge under. They select some place in the pond where the rays of the sun can penetrate, which drive away the musquitoes, these insects not being able to bear the hot sun. At other times during this season they may be found in the more open parts of the forest, to which they resort for the same reason.

It is a generally received opinion with deer hunters of the western and southern states, that deer get up to feed at the rising of the moon, whether during the day or night, and they pay particular attention to this fact in still hunting in the day time, and in watching for them at deer licks during the night. We think that this opinion, so far as the night is concerned, is correct, for the fact is well known to deer hunters, that they do not feed much during dark nights. Hence it is probable that they rise with the moon, enabling them to see more distinctly.

Deer invariably get up to feed after a shower of rain, more particularly if there has not been a shower for some time. This is unquestionably a fact which all still hunters regard, and this is a favorit time to kill a deer. They may be induced to stir about at this time for two obvious reasons, first because it is disagreeable to them to lie down in the water; secondly their favorite food is refreshed by a shower.

In passing from place to place in the day, they invariably kee in or near the margin of thickets, if there are any in their route, an if there are none, then they pass where the trees are thickest, an if there are neither trees nor thickets intervening, and there shoul be patches of high grass, or weeds, they will pass through them.

In passing through hills, or mountains, a deer never attempts to ru directly to its summit by the nearest and steepest course, but wind about at a gentle angle, somewhat after the meanderings of a turnpik road, in descending or ascending from, or to, the hills, or uplands they observe the same rule; and in passing over hills, or mountains they invariably pass through the low grass between the high points and they never, when pursued, pass over the high knobs, or peaks o hills; hence when in deer driving a hunter takes a stand in the hills he selects the lowest gaps.

Having now thrown out a few hints in regard to the natural characteristics of deer, we proceed to enumerate the different methods of hunting them, there are three: still hunting, driving, and fire hunting.

STILL HUNTING is by far the most common method of hunting deer, it is very appropiately styled *still* hunting, in consequence of the absolute necessity of being exceedingly careful not to make the least noise, as the sense of hearing is remarkably acute in the deer.

The Indians excel in this kind of hunting, for although their rfles, or shot guns, are of the most inferior order, they are quite successful in still hunting, in consequence of their hunting with much more caution and patience, than white men. When they get on favorite hunting grounds, they walk very slowly, and stop and look around them, very often, and approach the deer very closely if they happen to be to the windward of them, the color of their dress also favors them very much, as it resembles the color of the trunks of trees.

As the sight of the deer is very quick, the experienced hunter is particularly careful about the color of his dress, for any bright color, as scarlet, white, or brilliant yellow, would immediately attract their attention; hence he is careful to have his dress of a brown, or other dark color, or of a pepper and salt or mixed color, resembling as much as possible the color of trees and old logs; it is also quite important if the hunter rides, which is most usual, that his horse should be of a dark color. The discription of gun preferred for still hunting is, of course, the rifle, and a favorite sized calibre is such as will receive a ball with a thin patch, thirty or forty of which will weigh a pound.

Sometimes, although not generally, the still hunter is accompained by an active dog, trained to walk behind his master, and to remain quiet until he shoots, but as it requires good training to have a dog so well disciplined, he is generally dispensed with, although such a dog would be of unquestionable advantage in many cases. For instance, sometimes a deer is shot through the muscles of the thigh, and paralized for awhile, so that a fast running dog might catch him before he could recover. We have known a deer shot through the lungs with a large ball and fall to the ground as if dead, but after a little while recover and make its escape.

In the fall season, "when auttmn's yellow luster gilds the world," a very favorite time for still hunting is during a white frosty morning:

"Soon as the morning trembles o'er the sky,
And unperceived unfolds the spreading day,"

until the frost has melted and dried. During this time deer invariably move about, and the leaves are so moistened by the frost that they will not crackle under the feet of the hunter and alarm the deer. Experienced hunters will not still hunt unless they are satisfied the deer are feeding, and the ground moist; and it is almost accidental if a deer is killed when it is lying down, and when the leaves are very dry.

Deer very generally during the warm weather get up and go to drink about the middle of the day, but are up but a very short time. This is a chance that is occasionally taken advantage of by still hunters, although it is not a favorite time. Another favorite time is immediately after a rain, more particularly if the weather should remain drizzly, misty, and warm, but if it should turn off cold, with a north wind, the deer resort to the thickets to screen themselves from the cold. At this time if the hunter is on hilly ground, he will find them in the closest thickets on the south side of the hills.

In the spring and summer months the deer feed towards sun-set and may often be seen feeding with the cattle, if they are not too much hunted, and on such feeding grounds as are adjacent to thickets.

When a deer has been approached by a still hunter, and has scented him, or, in hunter's phraseology, "got the wind of him," or when he has had but an imperfect view of the hunter, he will usually make a few bounds into an open space and stop, in order to satisfy his curiosity and ascertain the cause of his alarm. The hunter should always shoot at this time if he can see the deer, or any part of him, as it will be his last chance to get a shoot at that deer. When a place has been discovered where deer abound, it is not a bad method of hunting to sit quietly on a log at some point where their paths crop each other, more particularly during the running season.

DRIVING. — In order to drive successfully, it is very necessary that the hunter should be well acquainted with the ground over which it is proposed to drive, and that he be well acquainted with the stands where the deer usually pass. An experienced hunter, after having examined the ground, will very generally form a correct opinion in regard to these matters.

The gun usually preferred for this description of hunting is, of course, the double-barreled shot gun of sufficient weight of metal. The calibre of the gun should chamber three or four of the largest sized buck shot. On this point there is a difference of opinion among hunters; indeed, some prefer the smallest sized buck shot. But leaving this matter to each one's fancy, it is certain that in regard to the load of shot no more shot should be put in at a load than a reasonable quantity of powder will carry upwards of sixty yards, without allowing the shot to strike the earth. We have generally preferred nine large buck shot for a medium gun, to eighteen, and are perfectly satisfied that it is a very common practice to put too many shot in a load, so that in shooting at an object sixty or seventy yards distant, one third of them will strike the earth. Now it is very evident that if those shot that strike the earth were not put in the gun, the force of powder expended in forcing them the distance they are carried, would have propelled the other shot with much more velocity, and would have caried them on a level to a much greater distance. Hence the folly of overloading with shot. The load of shot and powder can be settled more accurately by practice, and by adaptation to the calibre of the gun, than by any fixed rule that can be laid down. We have a few acquaintances who prefer the rifle carrying a ball of about thirty or forty to the pound, to a shot gun. These gentlemen are, however, "great shots," and will shoot a deer through with a single ball oftener than they will miss him, although he may be at the top of his speed. There are two advantages that the rifle has over the shot gun in driving; the first is that, if you strike a deer with a large rifle ball you do

more execution than if you strike it with a buck shot. Again:
deer makes a stop within the range of the driver, he can kill at
h greater distance with a rifle than with a shot gun. Those who
ery expert in using a rifle, often prefer them at a stand where
is not much undergrowth. Under other circumstances the shot
preferred.

description of dogs that are preferred for driving are, as a mat-
course, hounds. Sometimes the tall, active, and sprightly stag
is preferred, and under other circumstances, beagles, or low, mus-
slow running dogs are preferable. Where deer are very numer-
nd the drives are short, slow running dogs are best. If the dogs
ow, the deer will prance about at their leisure, and will very often
nd look back at the dogs, and squat in the bushes until the dogs
ach within sixty or seventy yards, and if the dogs happen to start
er deer, they will remain until the dogs have passed. It must
y evident, under these circumstances, that the driver and stand-
oth have a better chance to get a shoot than if the deer were
d hard by a fast "*team*" of dogs.

re are, however, circumstances under which very speedy hounds
be preferable, for instance, where deer are very scarce, and the
very large. Under these circumstances, it is often necessary
ess the deer hard to force them by the standers and to avoid
the trail if the deer should be very shy, and should happen to
great start from the dogs. Indeed, the same causes that make
ery scarce make them quite shy. In the selection of stands we
already given the reader sufficient data under the habits of deer.
driving deer, as well as bear, if the driver expects to get a shot,
ld be very imprudent to whoop to the dogs, as it is unnecessary,
y are active and acquainted with the drive. If too much noise
made, and the drive is thickety, a deer will very generally run
t distance and stop, particularly if the driver has come upon him
ounced him up without trailing him. He will stop to satisfy
lf as to the cause that has sprung him, and will generally stop in
en place where he can get a view of his intruders.

> "But 'ere his fleet career he took
> The dew-drops from his flanks he shook,
> Like crested leader, proud and high,
> Tossed his beamed frontlet to the sky;
> A moment gazed adown the vale;
> A moment snuffed the tainted gale;
> A moment listened to the cry
> That thickened as the chase drew nigh."

he driver does not get a shot at this time, there is but little
for him when the deer starts again; and, under these circum-
s, he should take the chance, whether good or bad, for the deer
op but for a "moment," as Scott has truly said.

E HUNTING.—The fire hunter usually wears a cap or ties up his
with a handkerchief, in order to avoid the large shadow that a
ould make; and, to a great extent, would prevent the hunter from
ering "eyes." The fire pan, as it is usually termed, is made of

rods of iron or of hoop iron. The shape of it is that of a deep frying pan, and attached to a staff some five or six feet in length. The structure of the pan is open work, so that the air may pass through it freely, that the fire may glow brightly as the hunter waves it along behind. The staff is placed over the left shoulder, and the left arm thrown across it in front, for support. The head of the hunter is always kept between the fire and the point or direction which he looks for "eyes." Sometimes fire hunters hunt on foot; but most generally on horse; in which case they cover their horse's back with a blanket to prevent the hot ashes and coals, as they fall from the pan, from burning the horse. It requires two persons to "fire hunt" successfully; one to carry the pan and find the deer, the other to ride immediately behind him and carry the gun and the bag of pine. The pine is cut up in pieces about six inches in length. When the hunter discovers the eyes of a deer, he waves his right hand behind him as a signal for his companion to hand him his double barreled shot gun, which is the favorite gun for this description of hunting. An experienced "fire hunter" can immediately distinguish the eyes of a deer in the darkest night, at a very considerable distance, from those of any other animal. First, by their brilliancy; secondly, by their size, and thirdly, by their distance apart. Their size and distance from each other are about the same as those of a colt, but they are much more brilliant. Indeed, colt's eyes are comparatively very dim. A careless hunter, or one inexperienced, would occasionally shoot a colt or horse by mistake. There was a neighbor of ours who went out on a fire hunting excursion, some years since, in Bœuff Prairie, and, after having discovered the eyes of a deer, he dismounted, and, with his companion, fastened their horses and advanced towards the deer. He walked after it for some distance, occasionally losing sight of the eyes; finally he "shined," when, behold, he had shot his favorite saddle horse. A deer gazes very steadily at the light; so that when once discovered, he may be generally approached and shot before he looks away.

If a hunter once loses the "eyes," and then discovers them again in another direction, he is satisfied that the deer is about moving off; and in that case, he embraces the first opportunity to shoot. A deer gazes at a light with great steadiness and intensity; on the contrary, a wolf or bear are constantly moving and turning their heads about, particularly the wolf; so much so, that he is readily distinguished by this habit of looking alternately to and from the light. The eyes of the raccoon are very often "shined" in fire hunting. They are readily distinguished from those of any other animal by their smallness, their brilliancy and their closeness, or the little space between them. They are generally seen on the edge of ponds, busily engaged in catching frogs and crawfish, or in trees.

The night most favorable for fire hunting is a wet, still, misty, dark night, after a rain, which renders the leaves that have fallen on the ground so moist, that they will make no noise as the hunter approaches to shoot. It is almost incredible how close a deer may be approached, under favorable circumstances, without appearing in the least concerned. We have often approached within twenty or thirty yards, and the deer would pay no attention to us. Indeed, they are very often shot before they would get up. Their eyes are most probably dazzled by the brilliancy of the light, so that they can not see, or they may be amazed at the novel appearance, or both. It is most surprising to see how very gentle and quiet the most timid animals are by fire light.

Daniel Boon, the far famed pioneer and hunter of Kentucky, is said to have met and "shined" the eyes of his wife. The first time he ever beheld her was during one of his fire hunting excursions, when a young man, in the midst of the romantic scenery of Western Virginia. It is said by one of his biographers, that she was on her way to the spring. If this be true, it proves that, under favorable circumstances, the eyes of a *dear* may be "shined" as well as those of a *deer*.

Art. VIII.—NORTHERN LOUISIANA AND ARKANSAS.

PARISH OF OUACHITA; MONROE, EL DORADO; CAMDEN; PRINCETON; LITTLE ROCK; HOT SPRINGS, ARKANSAS; THE MAGNET CAVE; CHALYBEATE SPRINGS; OIL-STONE QUARRIES OF ARKANSAS; FARMERSVILLE; DESCRIPTION OF THE HOT SPRINGS; SOCIETY, HEALTH, WATER, ETC., ETC.

(CONCLUDED FROM JANUARY NO.)

These oil-stones are wagoned to Little Rock at an expense of from one-half to three-fourth cents per pound, and thence to different parts of the Union. But as there will soon be boats running on the Ouachita to Rock Port, only about 24 miles from this, and by a far better road, the expense will be much reduced.

The production of the country about the Hot Springs is principally corn—the broken nature of the ground allowing but small tracts to be brought into cultivation, and these not numerous. The farms are small. Some wheat of an excellent quality is also produced.

We went from here to Iron's Sulphur Springs, which are situated a little north of west, between the north and middle fork of the Ouachita.

These springs were formerly much resorted to, but Sulphur Springs having been discovered in so many more convenient places, they have lost much of their wonted reputation.

From the Hot Springs to Blakely's Mountains, a distance of 16 miles, the land is generally tolerably good, particularly on the borders of Glazy Pool—a large stream or creek, which empties into the Ouachita some eight miles above the springs. Blakely's Monntains is the highest range in the environs of the springs, and the ascent steep, though a fine wagon road crosses them —beyond these, until you arrive at the north fork of the Ouachita, the road passes near the river and has fine bodies of good land near it—but from the quantity of overflowed land is considered quite unhealthy.

With the exception of the margin of the river and the creek bottom, the hills are nearly all composed of slate—having a northern *dip*.

This slate appears to be of a good quality, though none of it has ever been quarried to test it fully.

Among the mountains are found great quantities of chrystalized quartz, which is a source of considerable profit to many who procure it for the purpose of selling it to the visitors at the Hot Springs.

Corn, oats, wheat and some cotton are cultivated, the corn yielding about forty bushels per acre.

This county (Montgomery) produces a considerable quantity of wheat, which is ground and wagoned to the counties south—some as far as Camden in Ouachita county.

Near these springs is the junction of the three-forks of the Ouachita, the north, south and middle forks, each a large creek of clear transparent water. The river thus commencing as it terminates, with three streams.

Retracing our steps after leaving the Hot Springs fifteen miles, we diverged to the right and struck the Ouachita at Rock Port, the ultima thule of steam navigation. This is the county seat of Hot Springs county of very recent date. Here is being constructed across the river a "Lattice Bridge," some 300 feet long, entirely enclosed and well built, cost $20,000; over this passes the military road before mentioned.

Crossing the river here, we travelled 30 miles, to "Barkman's" on the Caddo. The hills are much the same as on the east side of the river, though more rocky.

The Caddo is a large creek emptying into the Ouachita, near Arch-adelphia in Clark county. From this to the Little Missouri the road passes through rich uplands, but sparsely settled. The Little Missouri is a large bayou which empties into the Ouachita, 35 miles, by water, above Camden. Its waters are turbid and the current swift, hence its name.

After crossing this the hills are higher and more sandy, and rocks entirely disappear. The soil not very rich, producing in favorable situations about 800 lbs. seed cotton the acre. After travelling some 30 miles we crossed the road leading from Camden to Washington, at the distance of 25 miles west of the former.

From the point we crossed this road to Eldorado, 50 miles distant, the hills become gradually less in elevation and the soil more productive. Cotton is here extensively cultivated. At Eldorado we again traversed the same road we had taken in going up, and, after proceeding some 15 miles, again diverged—taking the road to Farmersville, the seat of justice of Union parish. The face of the country is much the same as on the other road; the production chiefly cotton and corn.

Farmersville is a neat and thriving village, located on the summit of a high hill, one mile from Bayou d'Arbonne. This is a large bayou, sluggish, and navigable for middling sized steamboats to Farmersville, a distance of 60 miles from the Ouachita river, into which it empties. At the crossing is the junction of the main branch of the d'Arbonne and Corneille—the former navigable for keelboats, for several miles. From this point to the Ouachita river, opposite Monroe, distance 31 miles, the road traverses Pine Hills, sandy and very productive, averaging 1000 lbs. seed cotton to the acre.

Thus we found the distance from Monroe to the Hot Springs, by Camden and Princeton, 207 miles, and by the west route, crossing the d'Arbonne, Little Missouri and Caddo 239 miles. The road by the former route being infinitely better in every respect.

Art. IV.—UNIVERSITIES.

DEFECTIVE ORGANIZATION OF AMERICAN UNIVERSITIES, ETC.

One of the wise and liberal provisions of the new Constitution of Louisiana calls for the establishment of a University in the city of New Orleans, devoted to the Arts, Sciences and Literature. In the first place, it may be said that of all cities in the Union, where such an institution on a broad and liberal platform should be established, New Orleans is the most important. The heart of the great Empire of the South and West, and in immediate proximity to the undeveloped regions of Mexico and the West Indies, it will be for this city to draw around her all the influences which letters, superadded to commerce, can afford. We would have her the Athens, as well as the Tyre of our country, and that there are any obstacles in the way of this which will not yield to enterprise, we are the last to admit. Let the views of our correspondent, then, receive the attention which they deserve. We are pleased to devote a few pages of the Review to the subject as one, not of local and circumscribed, but the most wide-spread and elevated, influences. We shall take occasion to append to this paper some extracts from the Report of Dr. Hawks, made to the Board of Administrators of our University a few weeks ago, in his character of President.

While the people of the United States surpass in general intelligence any other nation which has yet existed, it cannot be denied that they are excelled by some of the nations of Europe in the higher departments of learning. The commercial achievements of America must strike with wonder all who contemplate them. Her flag is borne into every corner of the world. Her merchant has become the carrier for nations who, a few short years since, had never heard her name. Her vessels are seen plunging through the briny deep, upon journeys half round the world, in which no sail is shortened because of darkness, and no stop at intermediate ports is made for fresh supplies. They compete against the greater cheapness of capital and labor of other nations, and distribute over the world all the blessings of commerce, on terms more favorable than ever before were known. In every branch of business enterprise, American superiority is so marked, that even Europe is beginning to acknowledge it. But not so in the number of learned men, brilliant as may be the instances of American excellence in the various departments of learning.

We wish to enquire why there is not the same marked superiority in learning, as in business enterprise? And we think the answer is:—business enterprise is free to all, learning is not. When we hear that one of our great merchants was the son of a poor farmer of New England, or that our largest manufacturer was, in boyhood, poor and friendless, we do not feel curious to know what lucky circumstance led to his eventual success. For, we know that business enterprise is open to all, and that success will attend, not those who begin with the most money, but those who possess the most energy, prudence and sagacity. The wonder would be, not why they succeeded, but why, if they failed of success, they did not succeed.

American parents desire, almost universally, that their sons should be thoroughly educated. And the exceptions are daily becoming more and more rare, in which such desire is not felt. Every young man in the Union, of sufficient capacity, would, if it were practicable, with the exception, perhaps, of one out of every hundred, be thoroughly educated.

There are two causes why, at present, it is not practicable:

1. The great majority, if properly prepared to enter a University, are not able to defray the expense of a University education.
2. The great majority, even if able to defray the expense of a University education, are not properly prepared to enter a University.

Could the system be so modified, that all would be able to meet the expense? This can only be ascertained by learning what might be made the lowest possible amount of expenditure. Nothing is more certain, than that at present, this amount is far beyond the ability of the poor.

Among the people of the United States is a deep-seated distrust and jealousy of the large cities as places for the seats of government. This we believe well founded. But the same distrust seems to have been extended to the large cities as seats of learning. The Universities have been established generally in the neighborhood of inconsiderable towns, and usually so far from them that it is inconvenient, and almost impracticable for the students to reside elsewhere than in the University hotels and dormitories; indeed it is usually forbidden. The students are thus forced to constitute a society of themselves, and the conduct of each is influenced entirely, or to a great extent, by the student ideal of propriety. In order the more clearly to shew the evil results of this system, one of the European Universities, that of Berlin, will be taken to illustrate what might be gained by establishing the American Universities in the cities. On the American plan, the student being required to board in a hotel provided for him, must board there at a fixed price. This price, moderate enough for those able to pay it, is for the poor enormous. Such a system proclaims that those not able to live well, and who are willing to live upon a bare subsistance, shall not enjoy the advantages of a University education. Among the students at the University of Berlin are a thousand, of whom the annual average expense does not exceed for each one hundred and forty dollars. That sum covers as well professors' fees, books, board, lodging, and clothing, as all other expenses. The professors' fees amount to about twenty-seven dollars and a half. But there is no hotel provided for the student. And we may safely assume of these thousand young men, that they take barely sufficient food to sustain life and strength. For breakfast, black bread; a dinner which it would disgrace an American slaveholder to give his slave; a supper barely sufficient to lull the cravings of hunger. But with all this, he enjoys the glorious privilege of starving the body to obtain food for the soul. And he is permitted to do so in a manner which does not expose his privations to the public gaze. Buried in the solitude of a large city, his conduct is uninfluenced by any student ideal of propriety. His fellow students around him number between two and three thousand. But his fellow men around him number three hundred thousand, and the student existence is merged in that of the citizen. As a charity-student, he would, perhaps, be better fed. But his privations are veiled by his solitude from the eyes of the world, his heart is chastened by his sufferings, when his eye meets the gaze of others, it does not quail from the feeling that he is sustained by public bounty, but with an inward consciousness that his very privations elevate him above those who seem more fortunate, he struggles on to better days. Debarred by his poverty from participating in the vices which tempt the young, he grapples the more ardently with the objects of his study. He is too poor to gratify the body; but the soul is fed, and fed daintily and richly.

These thousand young men constitute, no doubt, an invaluable check upon the conduct of the others. The rich must toil too, and toil hard and incessantly, or they will be far outstripped by the poor in the pursuit of knowledge. They must live temperately also, or the cool brains of the poor, rendered vigorous by their abstemiousness, will far out-match them.

A University education can never be brought within the reach of all, unless the expense of the student is reduced to the lowest possible point. With us, University education is a subject of great importance in a political point of view. The more universally educated the people become, the more stable will become the republic. Among a people universally well informed, a republican form is not only the natural, but it is the necessary form of government. Those who are sincerely conservative, must be the friends of universal education; for intelligence is the most deadly enemy of all innovations, which are calculated to subvert the government. Endowments of city-Universities which would exempt the student from the payment of professors' fees, could hardly create a perceptible increase in taxation, and would be of vast importance to those barely able to subsist themselves during their studies. Provisions and fuel cost about twice as much in Berlin as in our Western cities; books cost quite as much, and clothing is the only item which costs less. If the payment of professors's fees were rendered unnecessary, the difference in cheapness would be so much in favor of our Western cities that one hundred dollars might be safely assumed to be more than equal to the hundred and forty dollars expended by the poor in Berlin. And to reduce the amount to one hundred dollars, would place the Universities within the reach of all, who possessed the energy requisite to derive full benefit from such advantage. And it must not be forgotten that on the present system, in a very large number of cases, perhaps, more frequently than otherwise, the expenditures for items not necessary, amount to a greater sum than for those which are necessary.

A greater cheapness is not the only advantage to be derived from the large cities as the seats of learning. An increased morality might, with equal certainty, be counted upon. If the students resided among the citizens, the ideas of propriety entertained by the citizens, would control their sentiments, and influence their conduct. If even profligate, they would not be so from fashion. If they were regarded as citizens, and a proper police enforced by the police men, and the student who violated good order arrested by the same policeman who arrested the common vagabond, and tried by the same peace-officer who tried the vagabond, the violation of good order would be the very opposite of the fashion.

The capacity to acquire learning, or to impart it, depends very much upon the state of the affections, the condition of the heart, of professor and student. It is only when the professor meets the student with an affection similar to that of elder brother for younger brother, and when there exists a feeling of respect of one for the other, that his instruction is imparted thoroughly, and that it is thoroughly appreciated. Where the professor is forced, as policeman, to watch for the pecadilloes of the student, a mutual distrust, and sometimes a mutual feeling of contempt will arise, where affection and respect ought to prevail, and must prevail, in order for instruction to do its part. And we think it may be contended that a city is more favorable than the country to a thorough development of the mind. There the young votary of learning will see displayed all the prominent features of the human character, every thing that is noble, as well as every thing that is mean standing out in bold and distinct outline. He will see a display of human energy, an utter abandonment of the soul to the one object of pursuit, which cannot elsewhere be seen. Having resided, perhaps, in some country neighborhood, where each individual is necessarily of considerable importance, he is astonished to find himself a cypher in the throng around him. Groups no longer cease conversation as he approaches; and the world is unconscious of his existence. He is seized by the energy of feeling around him—his heart throbs with a vigor never before experienced—he determines to triumph over the indifference of the multitude—he starts off with an ardor inexpressible upon the glorious pathway of learning. A Franklin, a Bowditch, and a host of other noble men have, in despite of their poverty, devoted themselves to the love of truth, and added unspeakably to the glory of their country. They may seem to have demonstrated that Universities are useless. To them city life was, to some extent, the substitute for a University. Had they grown up in thinly settled country neighborhoods, they would have lived and died, as thousands annually do, profoundly ignorant of the great gifts heaven had bestowed upon them. For one such a man to pass from the cradle to the grave, his mind undeveloped, is a national calamity. Had Bowditch enjoyed the advantages of a University education, America, too, would have had her La Place.

But, it may be said, that if the advantages of a University education were brought within the reach of all, by reducing the cost of subsistance to the lowest possible point, a majority of the young men of the country could not avail themselves of such advantages, because of their want of the requisite preparation to enter a University. This is, no doubt, true at present. We only contend that for the present the number would be largely increased, much more than quadrupled. In less than ten years the effects of the new system would be manifested n the most marked manner upon the common schools and high schools. The vacancies of teacher in these schools would soon be all filled by University graduates. Free schools are extending themselves so rapidly, that they will soon be within the reach of all. The great question now, with reference to them, is—how shall they be properly supplied with teachers? Free Universities would supply them, and abundantly and cheaply. And they, in return, would send to the free Universities tens of thousands of well prepared scholars, with minds thoroughly trained for entering upon the higher departments of learning, and with souls burning with enthnsiasm to explore truth in its most hidden recesses.

THE UNIVERSITY OF LOUISIANA.

We referred in the opening note to the University of Louisiana. The question of appropriating funds for its support is now before the Legislature of the State. That there will be a magnanimous liberality in the matter upon the part of that body we are left to infer from the enlightened spirit in regard to education which is now exhibiting itself in the State. The Legislature cannot but carry out the instructions of the people themselves when speaking in their primary capacity. We take our stand upon the Constitution. What will be twenty or thirty thousand dollars from such a State, devoted for a few years towards the establishment of an institution which will be an honor to the South, if not an ornament to the country. In vain will be all the efforts at primary education if there must be nothing beyond. Men must be reared and fitted for the highest pursuits and engagements of life, and reared and fitted AT HOME. The South should take charge of her own sons, and not entrust them to the tender keeping and instructions of those who are hostile to the interests which these sons are hereafter to maintain. Shall this continued drain of money also be allowed, which has enriched the schools and colleges of every section of the Union at the expense of our own? Let us rather invite students to come among us, and keep our own where they are!

We do not think that the University of Louisiana will be any expense to the State. Hundreds of students from every quarter will flock to its various departments, and the fees of Professors must soon become entirely adequate to their support.

It can be shown as a matter of figures, that a gain will result from this movement entirely independent of those public considerations we have alleged above. It is computed that $60,000 is even now expended annually in this State by those who are attracted here by the Lectures of the MEDICAL School. It would be fair to assume half that amount for the LAW Department, and should the LITERARY and SCIENTIFIC prove as successful, double the sum may be relied on from these sources. We urge this, not so much as an argument, but as a fact worthy of consideration by those who measure public movements by questions of *pecuniary* gain or loss which they involve. Even they may be convinced. But to the Report.

The following are the results of the Medical Department of the

University for the year 1847, as furnished in the letter of Dr. Wadderburn:

"SIR: — In accordance with your request I have to make the following report, concerning the Medical Department of the University of Louisiana.

The number of Medical Students is one hundred and sixty-two, notwithstanding the loss we have sustained in the number of the class from idle reports that were prevalent throughout the South and West, concerning the health of the city. Had the country been informed on the subject of the epidemic, which had entirely disappeared a month before this session of the School, we should, no doubt, have had a class of two hundred and fifty.

The amount of twenty-five thousand dollars, appropriated by the Legislature for the erection of the building for the Medical Department has been expended, and the Professors have assumed the responsibility for seven thousand dollars over this amount, in order that the building could be so far completed as to enable the Faculty to use the Lecture Room.

It will require fifteen thousand dollars more than the appropriation, to finish the building according to the plan and specifications."

The Law School is thus referred to by the Hon. H. A. Bullard:

"SIR: — I have the honor to report to you according to your suggestion, the present condition of the Law Faculty of the University.

The number of students in attendance, at this time, is thirty-one, most of whom attend the Lectures in all the branches taught. Our Lectures commenced on the first Monday of this month, by three professors only, a successor to Professor Wilde not having yet been appointed. Until that Chair shall have been filled, the branches, which had been specially assigned to Mr. Wilde, will be taught by his surviving colleagues."

In relation to the extended influences of the University, Dr. Hawks remarks:

"The State, in founding the institution, doubtless meant to accomplish the greatest possible amount of good; and, except as it does good, it is worse than useless, it is positively injurious, and does not deserve the patronage and support of the government.

In a country like ours, where every path of usefulness and honor is open to every man, where there is not, and cannot be, an aristocracy of learning any more than an aristocracy of rank, the State is vitally interested in making the means of attaining sound knowledge as common as possible. The humblest child in Louisiana may become one of her most distinguished and useful men; and thus repay the State tenfold for all the fostering care she may have bestowed upon his education. In some countries, (and those be it remembered *not republics*,) such is the paternal care of the government, that the instructors of her institutions of learning, high and low, are officers of the State, and paid entirely from the public treasury; while the doors of her schools colleges and universities are thrown wide open to all comers: merit and morals are the only grounds of admission or advancement. It is not possible for us, at this time, to adopt a system, similar in all respects to this; but it is desirable, and it is believed to be practicable, to adopt the best features of the plan, by the free admission into the preparatory school, and into the academic (as contradistinguished from the professional) schools of the University, of *all who are worthy* and *sufficiently prepared*. Indeed, in our country, this would seem to be but a simple act of justice, inasmuch as many parents, unable to afford to a child a liberal and full course of instruction in the University, are yet required to pay a portion of the tax for education. But there are many youths whose parents are both able and willing to pay for the education of their children; nay, who would not be willing to send their sons to the University without making payment. But shall an invidious distinction be made between these, and those unable to pay? By no means. An attempt has been made in the statutes of the University, submitted to the consideration of the Board as part of this report, to meet this difficulty, and to that I respectfully refer."

The following judicious reflections in the Report refer to the peculiar character which should attach to an University established in New Orleans. We admire the practical turn which is advocated, and the preference given to the *useful* over the *ornamental*. The time has come when our Colleges are to aim at something more than Domine Sampsons. The man is ignorant and helpless, whose learning aids him nothing in his contact with his fellows. We must learn to meet the world—to know, if not control its ways, and a proper and useful direction may be given to learning from the very moment its rudiments are gathered.

"Without adopting all the views of modern utilitarianism, we hesitate not to say that the education is essentially defective which discards all consideration of utility. What is our condition?—Brought, by position, into immediate and direct contact with the French language, and with important relations constantly increasing with those who speak the Spanish, surely a thorough knowledge of these two modern languages, becomes, to us at least, of primary importance. But more than this—contemplate our geographical position. We are at the outlet of a valley, affording to us thousands of miles of inland navigation, and covering an extent of territory sufficient for the proudest empire, all bound together in a community of interest by that majestic river and its tributaries, which are, as it were, the chains by which the Omnipotent has fastened us together in indissoluble union. Do not these things clearly indicate our responsibilities and our duty? If we be not recreant to our duty, it must be that the influence to be exercised over this immense region, for good, by this great commercial emporium is literally incalculable. Place the University of Louisiana on a broad and liberal basis, and, independent of the direct benefit to our own State, hundreds of students will be found flocking here to the several departments, from all parts of the valley. This immense region is to be made the smiling home of millions of human beings. Its present population, although in number one half of the whole people of the United States, is yet scarcely perceptible on the broad surface over which it is scattered. The valley is to be subdued to the purposes of civilized man. Intelligence, (information that can be made subservient to this great end,) is indispensable. Science must be taught in its practical applications. With every variety of soil and vegetable productions, with immense wealth, now locked-up in mineral treasures, with a constantly increasing necessity for facility of communication throughout the valley, it is obvious that the field for intellectual culture is vast indeed. There is scarce a department of natural science which may not be profitably called into requisition. The chemistry of agriculture and manufactures; geology, mineralogy, mining, turnpikes, bridges, railroads, viaducts, aqueducts steam in its various applications—architecture with its kindred subjects, machinery, in short, all that is included under the general terms civil engineering, and mechanics—all are of direct and immediate interest. Our scientific course should be eminently a practical one; nor will it be confined to those students who are pursuing the regular and complete course of the University. Provision, it will be seen, is made in the statutes for a student who wishes to pursue a particular course, at the close of which he may receive his appropriate certificate or diploma from the institution. It affords me no little gratification to say that, as far as I could gather the views of the Board on the subject, in private intercourse, they correspond with that here presented; and on my recent visit to Harvard University, I found that by the private munificence of an individual, a foundation was laid for precisely a similar course of instruction in the practical application of science. It will thus be seen that without concert or communication even, the oldest and the youngest Universities of our common country, situated at the extreme north and south of our confederacy, by a gratifying coincidence of opinion, were simultaneously resolving on a similar step in education, as being demanded by the condition of our wide spread country.

But there is another department of which our situation requires us not to be unmindful. There should be a professorship devoted to COMMERCE in all its manifold relations. It presents a vastly extensive field, embracing the general history and statistics of commerce, its relation to the policy of nations, and the consequent happiness of man, its connexion with history and influence on civilization, the principles of commercial and maritime law with various other topics that readily suggest themselves. This feature, if adopted, would be peculiar to our University."

We give a passage in relation to the pecuniary considerations involved in the University:

"A grant of *money*, however, will also be indispensable, and, of course, the amount required must be largest in the beginning. Without a sufficient grant of means, it is obvious that success is impossible, and the very want of success thus created, will produce a distrust in the Legislature fatal to the institution. To me, it seems, that on the part of the Legislature, a generous confidence in the prudence and good faith of the board, is wise policy and enlightened legislation. If funds are granted, all of which must be disbursed under your direction, it appears to me there can be no waste, for your periodical reports present the history of your appropriations of every cent confided to your trust. Unless Louisiana is willing to make an effort on a *liberal* scale, the enterprise had better be abandoned. And why, may I ask, should Louisiana not make such an effort as is worthy of her? Her taxes for education alone annually amount to about $300,000. Of her other taxes, how large a proportion is paid by New Orleans? Take, for instance, the tax that has been paid for years by the city for internal improvements. Look then through the State, and find, if you can, a single parish which has not had the benefit of this tax, with the solitary exception of the parish of Orleans. It has never, as I believe, had an appropriation of one cent for any purpose of internal improvements. Surely New Orleans may then hope for a grant of means, the object of which is not merely her individual advancement, but the permanent intellectual improvement of the whole State. Beside, the amount of money that will actually be brought into the State by the University, added to that which is now sent out of the State to the North for purposes of education, prove it to be direct economy in a mere pecuniary point of view, to sustain the University liberally. The amount sent out annually is at a very low estimate, from 60 to $80,000—the amount brought into and expended in New Orleans by the present Medical class alone is $60,000 in six months. Of this a large part comes from without the State. Let the University be only moderately supported with students in all its departments, and it will cause an actual circulation of more money in the State, brought from abroad, than all its annual expenses amount to. Other States, less wealthy than Louisiana, have built up their institutions by judicious liberality. One of our best Southern Colleges is at Columbia, S. C. The State gives it $25,000 per annum. It is money that procures suitable Professors elsewhere; money, therefore, will do it *here:* and with suitable Professors, what is to prevent Louisiana from having an University second to none in our country? In what will she differ from others, (if possessed of the necessary appliances) save in the parallel of latitude in which she is placed? As buildings are to be altered (if the old government buildings are obtained) books and apparatus to be obtained, and competent professors to be paid, a grant to the literary and scientific departments of less than $30,000 a year for two years will not suffice. And in enforcing this application, let it be remembered, that to Louisiana will belong the honorable, and in America, *peculiar* feature of opening the doors of her highest literary institution to all who present themselves possessed of character and capacity. If the sum above named should appear to be large, it must not be forgotten that *every thing* is to be provided, and that much of the expenditure is made once for all. A foundation must be made for a library by procuring some of the indispensable books of reference in the department of each Professor; apparatus must be purchased, and the buildings must undergo some repairs and alterations. These last two, it will be borne in mind, are not annually recurring sources of expense."

The following letters, published in connection with the Report, show how lively an interest some of our enterprising citizens already manifest in the success of the University. That of Maunsel White, Esq., is peculiarly deserving of consideration. It is the first, as we think, successful movement made in the world to introduce Commerce as a subject of University knowledge. We rely upon the happiest influences for our whole country in the result. The time will come when the supinenes of the past upon this subject will appear as a crime.

The letters of our fellow citizens, Judah Touro and Glendy Burke, are honorable to the high public spirit of these gentlemen:

New Orleans, January 5, 1848.

Rev. Dr. Hawks, President of the University of Louisiana.

Dear Sir: — I enclose five hundred dollars, which I beg leave, through you, to present as a donation to the University.

The object of the gift is encouragement in the cultivation of the Hebrew language, and the condition of my donation is, that (the principal remaining untouched) the interest of the sum enclosed, be annually appropriated to the procuring of a gold medal to be bestowed as a premium on the best scholar of the year in the Hebrew language.

Should there be no need of the *immediate* appropriation of the interest as above directed, or should there be hereafter, in any year, no student entitled to the medal, then I wish the interest thus unexpended to be laid aside until it amounts to a sum sufficient to yield an interest which will pay annually for a gold medal worth $15, to be given in each year to the best scholar in Ancient History; after which, I wish such medal to be annually bestowed.

With my best wishes for the prosperity of the University,
I am, Dear Sir, Respectfully,
JUDAH TOURO.

New Orleans, January 17, 1848.

Rev. F. L. Hawks, President of the Univresity of Louisiana.

Dear Sir: — The sum enclosed in this note, five hundred dollars, I desire to present through you to the University.

The condition of the gift is, that the principal shall remain untouched, and the interest thereon shall annually be appropriated to procuring a gold medal to be bestowed on that pupil in the University who, in any year, shall excel in Elocution. The endowment is designed to establish what I wish to have called, "*The Burke Premium for Elocution.*"

Wishing all possible prosperity to the Institution,
I am, Dear Sir, Yours, truly,
G. BURKE.

New Orleans, January 28, 1848.

To the Board of Administrators of the University of Louisiana.

Gentlemen: — Regarding with deep interest the movements now in progress among us for the establishment of a University, devoted to the Arts, Sciences, and Literature, I conceive that a further service may be rendered by me than in the character of an administrator of the Institution.

In this view I have succeeded in making some collections from public spirited citizens, and shall continue the effort that the funds may be invested in six per cent stocks, and I shall also dispose of some property on ground rent, to be donated and invested in a similar manner.

The object of this movement is to secure an endowment for a *Chair of Commerce, Public Economy and Statistics*, in the University. These matters have not, so far as I am informed, been made the subject of especial study in any of the Institutions of this country or of Europe. The States of the German Zoll Verein, indeed, as we learn by the foreign mail of to-day, constitute an exception, as they *intend* a "*Commercial University*," for merchants, manufacturers and commercial lawyers.

It will be the proud satisfaction of *New Orleans* to have taken the lead of all other commercial cities of the world in this matter, and it may be confidently affirmed that this important department of knowledge could be prosecuted with higher success and efficiency in no other city. To her commerce is the all and all of prosperity, and she the spontaneous, youthful, yet vigorous offspring.

A plan for the above professorship has been drawn out, at my request, by Mr. De Bow, a synopsis of which is annexed:

I am gentlemen with respect,
MAUNSEL WHITE.

PROFESSORSHIP OF PUBLIC ECONOMY, COMMERCE AND STATISTICS:

Embracing the Theoretic and Practical or Statistical Departments.

I. The THEORETIC: Origin of Society and Government; Theory, Forms and ds of Government; Right, Duties and Relations of Government; Sources of ational Wealth and Progress and Causes of National Decline; Production, stribution and Consumption of Wealth with the Laws appertaining thereto.

I. The PRACTICAL AND STATISTICAL: Statistics of Population and Wealth in eir application to Commerce, Agriculture and Manufactures.

1. History and Progress of COMMERCE, its Principles and Laws; Home and oreign Commerce; Tariffs, Treaties, Life Insurance, Roads, Canals, Shipping, d Revenue, Systems of Reciprocity; Balances of Trade; Mercantile and avigation Systems; Colonies and Colonial Systems; Banks, Finances, Acunts, Transportation, Book-keeping, Principles of Merchant Law; Commerce Nations, Ancient and Modern; Geography of Commerce, Commodities of ommerce; Literature of Commerce, etc., etc.

2. Progress and results of AGRICULTURAL SCIENCE; Principles of Agriculture; omparative condition of Agricultural, Commercial, and Manufacturing Communities; Statistics of Agriculture, etc.

3. Origin and Progress of the MANUFACTURING SYSTEM; its relations to the ther Pursuits; Invention and Machinery in Manufactures; Condition of the Manufacturing Classes; Statistics of Manufactures, etc.

Text-Books for the Course among others.

Locke's Essays on Government; Lieber's Political Ethics and Hermeneutics; Montesquieu's Spirit of Laws; Smith's Wealth of Nations; McCulloch's Commercial and Geographical Dictionary; Say's Political Economy; Vethake's Political Economy; Carey on Wealth; Stephen's Progress of Discovery and Maritime Commerce; Heeren's Commercial Researches; Vincent's Commerce f the Ancients; McGregor's Commercial Legislation; Annual Reports Amerian and Contemporary Governments, etc.

It should be required from the professorship to prepare and deliver twelve public lectures each year, upon subjects determined in its organization. For example, upon the "*Sources of National Wealth and Decline;*" on the "*History d Progress of Commerce;*" on the "*Foreign Commercial Relations of the United States, including our Treaties;*" upon "*Finance;*" on the "*Results of Agriculture d the Advancement of Agricultural Classes;*" on "*Manufactures;*" the "*Science f Statistics;*" the "*Literature of Commerce,*" etc., etc.

It would be necessary to purchase *immediately* a library* for the Chair; and I ave made up a brief catalogue of those works which are most important. I have oubtless overlooked many, but these can be purchased from time to time. In ct. those named constitute but a small part of the books which are desirable. hey can be had in this country or in Europe.

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* A public library in some central position, open at all times and free to all rsons, is a great want in the city of New Orleans. No city in the Union is so efective in this particular, despite the strenuous efforts of the Second Municility. We would have such a library for a large part *commercial* in its charter. What are the Municipalities doing, it is often asked, in regard to the Fisk nation of books and building? We intended long ago to refer to this matter, t neglected in a press of various engagements. Would it not be advisable to nstruct an edifice for this library upon the University ground? What position re appropriate? Having before us the letter of Mr. Fisk, directed to our terprising fellow-citizen, B. F. French, Esq., we will insert it to refresh the emory of our readers.

MY DEAR SIR: — The motive which actuated me in the purchase of your valuable and exten- library, containing many rare works, was, that it might be preserved to the city of New eans—with which place I have been connected in a commercial way for a great number of

LIBRARY OF THE CHAIR OF PUBLIC ECONOMY, COMMERCE AND STATISTICS.

Œconomics — Stewart's Inquiries in Political Economy; Lauderdale on Public Wealth; Smith's Wealth of Nations; Ricardo's Political Economy and Taxation; Malthus' Works on do.; Torens on the Production of Wealth; M'Culloch's Works; Dr. Cooper's Treatise on Political Economy; Cardoza's do.; Whatley's do.; Chalmers' do.; Scrope's do.; Seniors' do.; Carey's Principles of Political Economy; Quincy's Logic of do.; Hume's Essays; West on Land and Capital; Ricardo's Dialogues; Bailey on Values; Jones on Wealth and Taxation; Boileau's Introduction to Political Economy; Young's Political Arithmetic, Foreign Works of Isnard, de Tracy, Say, Garnier, Ganilh, Douffroy, Sismondi, Droz, Blanqui, Rau, Chevalier, Rossi, Nerri, Becarria, Gioja, Pecchio, Munoz, Ward, Ortiz, Guarina's Estrado, Dictionaire d'Economie, Scrittori Classici Italiani di Economia Politica, etc., etc.

Commerce — Robertson's Mappe of Commerce; Roberts' Treasure of Trafficke; England's Treasure by Foreign Trade, by Thos. Mun; Fortrey's England's Interest and Improvement; Coke's Treatises on Trade, etc.; England's Great Happiness; Britannia Languens; Childs' Discourse of Trade; Dudley North's Discourses on Trade; Davenant on the Balance of Trade; King's British Merchant; Woods' Survey of Trade; Defoe's Plan of English Commerce; Gee's Trade and Navigation of Great Britain; Carey's Discourse on Trade, &c.; Dobbs on Trade of Ireland; Decker on the Decline of Trade; Tucker on the Trade of France and England; Tucker on Commerce and Taxes; Tucker on Trade of Turkey; Bell's Vindication of Commerce and the Arts; Postlethwayt's Dictionary of Trade and Commerce; do. Commercial Interest of Britain; Cantillon's Analysis of Trade; Rolt's Dictionary of Trade; Mortimer's Dictionary of Trade and Commerce; Mortimer's Elements of Commerce; Tucker's Tracts on the same subject; Sheffield on American Commerce; do. on Irish Commerce; Oddy's European Commerce; Mill's Defence of Commerce; M'Culloch on its Principles and History; Pitkins' Commerce of the United States; Hagemeister on Russian Commerce; McGregor's Commercial Statistics; Melon's Essay on Commerce; Savary's Dictionary of Commerce; Condillac, du Commerce et Le Gouvernement; Ricardo's Traite du Commerce; Arnauld's Balance du Commerce; Sismondi, Laboulinierre, etc., on Commerce; Douglass' North American Settlements; Bacon's Colonization of the Free States of Antiquity; Moseley's Treatise of Sugar; Brougham's Colonial Policy; Edward's West Indies; Bliss' Colonial Intercourse; Bliss on the Timber Trade; Martin's Statistics of British Colonies; Merivale's Lectures on Colonization and Colonies; Mun on the India Trade; Robertson on Ancient Communication with India, and Modern Trade with it; McPherson's European Commerce with India; Milburn's Oriental Commerce; Chitty on the Laws of Commerce, Manufactures, &c.; Hooper on Ancient Measures; Reynardson on English Weights and Measures; Arthbutnott's Coins, Weights and Measures; John Quincy Adams' Report on Weights and Measures; Gordon's Universal Accountant and Complete Merchant; King's British Merchant; Hertslet's Treaties of England; Evelyn's Navigation and Commerce; Anderson on Commerce; Macpherson's Annals of Commerce; Vincent's Commerce of the Ancients; Stephen's Progress of Discovery, Navigation and Commerce; Cooley's Maritime and Inland Discovery; Heeren's Commercial Researches; Huet's History of Commerce; Depping's Histoire du Com-

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years — and also to carry into effect the object of my late brother's request of establishing a public library for the benefit of the reading community, and to afford a pleasant resort to the numerous strangers who visit that great and growing commercial metropolis from every quarter of the world.

That this purpose may be promptly commenced, and ultimately extended, until it shall become in some degree commensurate with the resources and magnitude of its population, I now embrace the occasion, which this purpose presents, of tendering the entire library to that city, and of assuring you of the very great pleasure I derive in making you the organ of communication, to its Mayor and Aldermen; knowing as I do, the deep intetest you take in founding and carrying out an enterprise of this nature, so connected with the intellectual and commercial, as well as classical and scientific reputation of that great city; and entertaining the hope that the advantage of your great experience and travels in Europe, as well as scholastic attainments, will be cheerfully bestowed, in systematizing and furthering this undertaking, and placing the library in a position for immediate use,

I am, very truly,
Respectfully your friend and humble servant,
ALVAREZ FISK.

merce; Martin's Commercio d'Veneziani; Petty on Money; Locke's Treatises on Money; Sir Isaac Newton on Coinage; Leake's History of English Money; Harris on Money and Coins; Snelling's Works on Coinage; Merrey on the Coinage of England; Thornton on Paper Credit; Foster's Commercial Exchanges; Liverpool on Coinage; Blake on the Course of Exchange; Rudong's Annals of British Coinage; Gilbert's History of Banking; Gallatin on Currency and Banking in the United States; Gouge's Treatise on do.; Carey's Credit System; Tucker's Theory of Money and Banks; Tooke's History of Prices.

Agriculture, Manufactures, Internal Improvements, and Statistics, etc., etc.—M'Adam's Observations on Roads; Parnell on Roads; Phillipps' Inland Navigation; Woods' Treatise on Railroads; Petty's Essay's on Political Arithmetic; Works of Arthur Young; Dickson's Husbandry of the Ancients; Chalmer's Comparative Strength of Great Britain; Colquhoun on British Empire; London's Encyclopædia of Agriculture; McCulloch's Statistical Account of British Empire; Porter's Progress of the Nation; Porter's Tables of Revenue, Population, etc.; Tucker's Progress of the United States in Population and Wealth; Holland's History of Coal and the Coal Trade; Fraser's Fisheries of Great Britain; Elking's Greenland Trade and Fisheries; Scoresbey's Arctic Regions; Murray's Polar Seas; Babbage's Machinery and Manufactures; Schrivenor on the Iron Trade; Ure's Dictionary of Arts, Manufactures and Mines; Bischoff on Woollen and Woollen Factories; Slater's American Manufactures; Morgan's Treatise on Life Insurance; Edmond's Tables on do.; Morgan's Essays on Probabilities Applied to Life Insurance; Bentham's Defence of Usury; Betero's Cause of the Greatness of Cities; Benjamin Franklin on the Increase of Men; Hume on Populousness of States; Short on Decrease of Mankind; Price, Wales, Malthus on English Population; Summer's Treatise on the Records of the Creation; Saddler's Law of Population; Allison's Principles of Population; Hawkins' Elements of Medical Statistics; Thackrah on the Effects of Arts, Trades and Professions on Health and Longevity; Eden's History of the Laboring Classes and State of the Poor; Walker on Pauperism; Carey on Wages; Farland's Inquiries Concerning the Poor; Pratts' History of Savings Banks; Prostitution dans la ville de Paris, par M. Parent Duchatelet; Dalrymple on Feudal Property; Maugham on Literary Property; Godson on Copy and Patent Rights; Blairs' Slavery Among the Romans; Blandinel on the Slave Trade; Phillips on the National Debts; Saxby on the British Customs; Sinclair on the Revenue of the British Empire; Dr. Hamilton on the National Debt; McCulloch on Taxation; Dr. Davenant's Political and Commercial Works; Beckman's History of Inventions and Discoveries; Jacob's on the Precious Metals; Public Economy of Athens, by Boeckh; Vaughan's Age of Great Cities.

Art. V.—IMMIGRATION INTO THE UNITED STATES.

THAT the world is watching the progress of these United States, has been so often repeated, that national vanity may be pardoned even when displayed on the puny attempts of some miserable tourist to disparage the vastness, he cannot grasp, and the institutions he cannot comprehend. But while this great and preponderating influence looming up in futurity like a mountain, and growing and expanding with every year, that tests the worth and proves the stability of our noble and free government, may well excite feelings of the proudest patriotism; let us be willing to analyize, most carefully, every force that swells the aggregate of our national strength, and ferret out every element of weakness and decay.

It is for the republican institutions of America we hope and fear most. It is not because the soil of America offers an asylum, and her corn fields bread to the oppressed, that she is to be considered the great problem with the solution of which is connected the happiness of our very race. Intimately connected with this question of the stability of our republican institutions, is to be viewed the influence of the vast accessions of inhabitants to our shore from distant lands. It has been the policy of America, from mingled motives, hitherto to encourage this daily increasing tide of foreigners. And the liberality of our government, and the course of legislation joined to the cheapness and excellence of the soil, have attracted from the earliest period of the Republic, the poor, the oppressed, and the adventurous, of all lands. The only checks in the transportation of the hosts have been extreme poverty, timidity and the lack of ships adequate to the mighty task.

It was early felt that wild luxuriance of nature needed hands to gather it, and that the ancient and boundless forests required something more than the natural increase of the first colonists to fill them during the first century, in order that they might become arable land. Foreign aid too had been received with deep gratitude during the war of the Revolution, and the first bands of immigrants were hailed by our fathers as brothers and friends. The first generation of those who succeeded the men of the Revolution has passed away. The three millions of the Revolution, and the six millions of the year 1810, have become now twenty millions, and the same necessity does not appear to exist in respect to a further increase of population. The terrible evils of a thickly populated country, as shown in the misery and famine of some portions of the Old World, have excited sentiments of doubt, that with all the unbounded frontier and the great valley of the Mississippi before us, we may yet complain of narrow limits. Party spirit has run high, and our fellow citizens of foreign birth, have, it has been thought, taken too prominent a part in political affairs, and by espousing in force one of the great parties have rendered themselves obnoxious to many of opposite sentiments. Besides many neutral men have been fearful that responding to a distinction unknown to others, and called on and marshalled by their own leaders, they might possibly hold the most dangerous position in a free state, that of a minority ready to turn the beam of political victory as fraud and ambition among their leaders might happen to sway. Even the friend of the foreigner must admit that many ignorant immigrants come yearly among us, and that the education proper for a freeman is not easily acquired after the years of youth. Many, especially among those who do not speak our language, are disposed to form associations among themselves, thus socially, if not politically, dividing themselves from our native population. Another, but less, important consideration comparatively, is that many of these immigrants being left in a state of destitution at the point of debarkation, or overtaken by poverty or disease, become a very serious tax to the community. At this we would not repine, although it appears hard that the land which has reaped the fruit of the strength and prime of the laborer's years should send him forth to be fed from the bread of another people.

It is then a question, acknowledged by all to be of the utmost importance, to ascertain, clearly, the amount of the foreign element in the United States. If the clamor on this subject is ill founded let us *dismiss* it from our minds, and if on the other hand poverty, ruin and anarchy, are like a pest to follow in the track of these increasing myriads, it is time to establish a *cordon sanitaire*. We do not know of any estimate, previous to those of Mr. Chickering's, found on reliable data, and we hasten to present to our readers some of that gentleman's results. The foundation is the custom house returns of the number of foreign passengers from 1820.

Years.	Total.	Years.	Total.	Years.	Total.	Years.	Total.
1820–21	5,993	1827–28	26,114	1834–35	52,899	1841–42	101,107
1821–22	7,329	1828–29	24,459	1835–36	62,473	1842–43	75,159
1822–23	6,749	1829–30	27,153	1836–37	78,083	1843–44	74,607
1823–24	7.088	1830–31	23,074	1837–38	59,363	1844–45	102,415
1824–25	8,532	1831–32	45,287	1838–39	52,163	1845–46	147,051
1825–26	10,151	1832–33	56,547	1839–40	84,146	1846 (1 qr.)	55,106
1826–27	12,418	1833–34	65,335	1840–41	83,504	. . . . . .	. . . . .

RECAPITULATION.

Years.	Total.	Years.	Total.	Years.	Total.	Years.	Total.
1820–25	35,691	1835–40	336,228	1820–30	135,986	1820–46	1,354,305
1825–30	100,295	1840–45	436,792	1830–40	579,370	Proportion,	100
1830–35	243,142	1845–46	202,157	1840–46	638,949	. . . . . .	. . . . .

These returns ought to be increased by the numbers who land in the British Provinces and find their way to the United States. The estimate, of Mr. Chickering, of an increase in this way of 50 per cent to be added to the custom house returns, would furnish a table in which the annual foreign increment is compared with the whole increase.

Proportion of Foreign Immigrants to the Increase of the Population of the United States.

Years.	Population.	Average Annual Increase.	FOREIGN PASSENGERS. Custom House.	Elsewhere.	Total.	Per ct.	Proportion.
1820–21	9.638,191	288,465	5.993	2,996½	8,989½	3·18	1 to 31·43
1821–22	9,920,656	290,743	7.329	3,664½	10,993½	7·78	26·45
1822–23	10,211,399	299.264	6.749	3,374½	10,123½	3·38	29·57
1823–24	10,510,663	308,035	7.088	3,544	10,632	3·45	28·98
1824–25	10,818,698	317,062	8,532	4,266	12,798	4·03	24·78
1825–26	11,135,760	326,354	10,151	5,075½	15,226½	4·66	21·46
1826–27	11,462,114	335,919	12,418	6,209	18,627	5·54	18·04
1827–28	11,798,033	345,763	26,114	13,057	39,171	11·32	8·83
1828–29	12,143,796	355,897	21.459	12.229½	36,688½	10·30	9·71
1829–30	12,499,693	366,327	27,153	13,576½	40,729½	11·11	9·00
1830–31	12,866,020	368,914	23,074	11,537	34.611	9·38	10·66
1831–32	13,234,934	379,491	45.287	22.643½	67.830½	17·90	5·59
1832–33	13,614,425	390.373	56.547	28,273½	84,820½	21·72	4·61
1833–34	14.004,798	401,565	65,335	32.667½	98,002½	24·40	4·10
1834–35	14,406,363	413,082	52,899	26,489½	79,388½	19·21	5·21
1835–36	14,819,445	424,925	62.473	31,236½	93,709½	22·05	4·54
1836–37	15,244,370	437,109	78,083	39,041½	117,124½	26·79	3·74
1837–38	15,681,479	449,642	59,363	29.681½	89,044½	19·80	5·05
1838–39	16.131,121	462,535	52,163	26.081½	78,244½	16·91	5·92
1839–40	16,593,656	475,798	84,146	42,073	126,219	26·52	3·77
1840–41	17,069,454	489,441	83,504	41,752	125,256	25·59	3·91
1841–42	17,558,895	503,474	101,107	50.553½	151,660½	30·12	3·32
1842–43	18.062.369	517.911	75,159	37.579½	112.738½	21·76	4·60
1843–44	18.580,280	532,761	74,607	37,303½	111,910½	21·05	4·77
1844–45	19.113.041	548,037	102,415	51,207½	153,622½	28·03	3·57
1845–46	19,661,078	563,752	147,051	73,525½	220,576½	39·12	2·56
1846 3d qr.	. . . . . .	. . . .	55,106	27.553	82,659	. . .	. . . . .
Total 26 yrs.	. . . . . .	. . . .	1,354,305	677,152½	2,031,457½	. . .	. . . .

RECAPITULATION.

Years.	Population.	Average Annual Increase.	Foreign Passengers. Custom House.	Foreign Passengers. Elsewhere.	Foreign Passengers. Total.	Per ct.	Proportion.
1820-25	51,099,607	1,497,569	35,691	17,845½	53,536½	3·57	1 to 27·98
1825-30	59,039,396	1,730,260	100,295	50,147½	150,442½	8·69	11·51
1830-35	68,126,540	1,953,425	243,142	121,571	364,753	18·67	5·36
1835-40	78,470,071	2,250,009	336,228	168,114	504,342	22·41	4·47
1840-45	90,384,039	2,591,624	436,792	218,396	655,188	25·28	3·96
1845-46	19,661,078	563,752	147,051	73,525½	220,576½	38·12	2·56
1820-30	110,139,003	3,227,829	135,986	67,993	203,979	6·31	1 to 15·83
1830-40	146,596,611	4,203,434	579,370	289,685	869,055	20·67	4·84
1840-46	110,045,117	3,155,376	583,843	291,221½	875,764½	27·75	3·63
Total 25 3-4 years.	366,780,731	10,586,639	1,299,199	649,599½	1,948,798½	18·40	5·44

Assuming the rate of increase of the whole white population of the United States to be 26·28 per cent in each decade from 1790, 28·80 per cent in the free, and 21·54 in the slave states; we have

	1790.	1800.	1810.	1820.	1830.	1840.
Free States, - - -	1,901,046	2,448,667	3,154,038	4,062,600	5,232,825	6,740,209
Slave States, - -	1,271,488	1,545,470	1,878,490	2,283,269	2,775,270	3,373,288
Aggregate, - - - -	3,172,534	3,994,137	5,032,528	6,345,869	8,008,095	10,113,497
Differences, - - -	- - - -	2,290	26,978	43,515	60,722	76,188
Original States and Teritories,	3,172,534	3,996,427	5,059,506	6,389,384	8,068,817	10,189,685
Add Louisiana, -	- - - -	- - - -	34,311	41,704	50,691	61,622
Add Florida, - - -	- - - -	- - - -	- - - -	- - - -	18,385	22,347
Total, - - - - - -	3,172,534	3,996,427	5,093,817	6,431,088	8,137,893	10,273,654
For'n Immigration	- - - -	307,678	768,187	1,430,906	2,399,485	3,922,152
Total White Population U. S.	3,172,534	4,304,105	5,862,004	7,861,994	10,537,378	14,195,806

Assuming 267,567 as the foreign population in 1790, and consider· their increase to be at the average rate of 26·28, we have

		1800.	1810.	1820.	1830.	1840.
Foreign Immigra'n fm	1790 to 1800,	267,567	337,996	426,838	539,031	680,714
" "	1800 to 1810,	- - - -	363,001	458,415	578,908	731,073
" "	1810 to 1820,	- - - -	- - - -	494,392	624,342	788,449
" "	1820 to 1830,	- - - -	- - - -	- - - -	665,647	840,611
" "	1830 to 1840,	- - - -	- - - -	- - - -	- - - -	888,705
Differences, - - - - - - - -		267,567 —40,111	700.997 —67,190	1,379,645 —51,261	2,407,928 pl's 8,443	3,929,552 plus 7,400
Total For'n Popula. in U. S.		307,678	768.187	1,430.906	2,399,485	3,922.152

By comparing these tables we find that a probable amount of four millions of our population are due to the immigration of foreigners, for the last fifty years. In other words, had immigration been stopped, our population would be at this time, other things being equal, about sixteen millions of souls. A nearer approximation is considered to be

		Proportion per cent. of the Foreigners to the	
		Increase of the whites.	Total wht. popul.
Foreign immigration from 1790 to 1800, including the immigrants and their children, from their arrival to the next census, - - - - - - - - -	307,687	27·18	7·14
Their natural increase at the rate of 26·28, &c. per cent. in 10 years, - - - - - - - - - - - -	80,872		
Foreign immigration as above, from 1800 to 1810, - - - - - - - - - - - - - - - - -	379,637	24·36	
Foreign population in 1810, - - - - - - - - -	768,187	- -	13·10
Their natural increase at the above rate, in 10 years, - - - - - - - - - - - - - - - - -	201,916		
Foreign immigration as above, from 1810 to 1820, - - - - - - - - - - - - - - - - -	460,803	23·04	
Foreign population in 1820, - - - - - - - -	1,430,906	- -	18·29
Their natural increase at the above rate, in 10 years, - - - - - - - - - - - - - - - - -	376,110		
Foreign immigration as above, from 1820 to 1830, - - - - - - - - - - - - - - - - -	592,469	22·04	
Foreign population in 1830, - - - - - - - -	2,399,485	- -	22·77
Their natural increase at the above rate, in 10 years, - - - - - - - - - - - - - - - - -	630,699		
Foreign immigration as above, from 1830 to 1840, - - - - - - - - - - - - - - - - -	891,968	24·32	
Foreign population in 1840, - - - - - - - -	3,922,152	- -	27·62

But surely, although our numbers would not have swelled to their present by four millions, had it not been for foreign immigration, we cannot consider this as representing at all the number of true foreigners, allowing that all born without our territorial limits are foreign in heart to our commonwealth. Many of these foreigners, and these sons of foreigners, have married the daughters of America, and shall the children of an American mother be thus considered as foreigners; this in our opinion is an entirely eroneous system of calculation. The increase of the foreign population, even that portion, which embraces the children of foreigners on both father and mother's side, is in every sense American, and the proper course to determine the foreign element, is, casting out of view the progeny, to enquire how large a population of foreign birth is now living in the United States. Assuming the average age of this population to be 25 years, and the ratio of mortality to be the mean of these tables, in England, from which country the largest proportion of the new comers emigrate, and striking out of view the increase by birth, we have as the surviving number of the foreign immigration in 1840—a result as below.

	Estimated Number of Emigrants.	Surviving in 1840.	Surviving in 1846.
1790 to 1800 - - - - - -	267,567	82,154	50,570
1800 to 1810 - - - - - -	363,001	177,863	137,801
1810 to 1820 - - - - - -	494,392	317,408	274,299
1820 to 1830 - - - - - -	665,647	530,018	468,388
1830 to 1840 - - - - - -	888,706	831,129	757,754
1840 to 1846 - - - - - -	875,764	....	842,660
		1,938,562	2,431,472

If we are correct in our opinion, and we believe that the most enthusiastic partisan will not consider the children of foreigners, born on this soil, as any other in feeling and sentiment than the progeny of native citizens, we have presented a result approximating nearly to the number of persons born in other lands and living in the United States during the year 1846, and comprising all who, in any proper sense, can be regarded as the true foreign element in our population.

Considering the ravages of disease among the large class of poor and improvident immigrants, and the fatigues of the voyage hither and subsequent travel, together with the mortality incident to settlers in a new country, and one differing much in climatic character from that of their birth; the deductions made from the gross number of estimated arrivals are probably below the truth; and the number of persons now residing in the United States may possibly not much exceed two millions. Of this number, according to Dr. Chickering, two-thirds may be regarded as males, and a very large portion, even at the time of immigration, is adult. Of course, the survivors of all the years of immigration prior to 1830 must be set down as adults. So that the proportion of adults to children may be, say, three to one. One half of the whole population surviving in the year 1846, may be seen to consist of those who emigrated to this country prior to the year 1835. This is a portion that, from their mature age and acquaintance with the institutions of our country, besides the possession of comparative wealth, must exert a great influence in forming the social character of more recent comers. They are, so to speak, a vast teaching class, dispersed over the whole country, advising the inexperienced and checking the rash among their countrymen. But, it is not our purpose to look at any arguments that concern the political aspects of the question. If we have alluded to any, it was merely to call attention in this way to the acknowledged importance of the enquiry, and then treat it in a purely economical and statistical manner. The value of this population, as workers, is worth a moment's consideration. The estimated number of the inhabitants of the United States in 1846, was 20,557,823, as by reference to the article on the "Progress of the American Union," in our last No., derived from the investigations of Wm. Darby, Esq. The Secretary of the Treasury gives as the sum total of the productions of the country, for the year included in the report of 22d July, 1846, reckoned in dollars, an aggregate of $3,000,000,000. The amount of individual average production is as near as may be, $150 in one year. It must be remembered that, of the foreigners, a larger proportion than the average are adult males; and of these more than the usual number comparatively belong to that class most actively employed in physical production. If we assume but two millions as the number of the foreign population, their aggregate annual production is the vast amount of $300,000,000, for 1846. In dwelling on the necessity and value to a country of the working class, we would not depreciate the importance of the managing and directing class; but, we say, that as the former are measured in importance by number, the latter are estimated in reference to enterprise, skill and science. A skilful foreman or overseer may wield as easily, and direct the physical forces of one hundred, as easily as ten laborers; and though cultivation and intelligence are to be desired in the one who labors with his hands, they are not so indispensable as in the labors of contrivance and management.

In conclusion, we must express the obligations due to the author of the pamphlet alluded to in this article, Dr. Chickering, who has furnished us a copy, and gives many interesting notes in a private letter to our address.

Art. VI.—McCULLOH'S REPORT ON SUGAR—REVIEWED.*

COMPARATIVE CONDITION OF SUGAR ESTATES IN WEST INDIES AND LOUISIANA—PROGESS AND PERFECTION OF SUGAR MAUFACTURE, ETC., ETC.

J. D. B. De Bow, Esq.,

It is but lately that I have been put in possession, through the kindness of a friend, of a copy of Professor McCulloh's report to Congress on saccharine substances and the art of manufacturing sugar. It is, in my opinion, one of the best documents which has ever been written on the subject. It makes known and describes generally, with great accuracy, all the latest and best improvements which have been made throughout the world in the sugar industry, and embodies an amount of useful information, which our sugar planters could not otherwise obtain without perusing a great many volumes. It is the work not only of a man of science, but of a conscientious one, who has represented things as faithfully as he could and without any kind of deception.

Mr. McCulloh paid unforturately but a flying visit to Louisiana, where he could not arrive during the sugar making season; he remained only a few days in the State, occupying himself chiefly, as he says, with inquiries concerning Rillieux's improved method, and an examination of his apparatus upon the plantation of Messrs. Benjamin

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* That the reader may discover the vast quantity of material which we have from time to time collected and published upon sugar and the sugar manufacture, we will only refer him to our back volumes. We know of no other source from which a tithe as much could be obtained. Should not every one, then, in any degree interested in this important staple, sustain with liberality the enterprise we have conducted at so much expense and labor. We had hoped for the *unanimous* support of the *sugar planters* at least. See Commercial Review, vol. I, 53, 54, 180; vol. II. 322, 212, 214, 267, 422; vol. III, 118, 231, 245, 580, 294, 299, 301, 341, 376—395, 421; vol. IV, 41, 129—157, 296, 393, 426, 427—447, 514; vol. V, 44—57, 81, 86, 181, 183, 187, etc., etc.

& Packwood. This is to be regretted, not only because we have been thereby deprived of the researches which the professor had the intention of making on the mucilage contained in the Louisiana cane juice. but also because, having seen very few of our sugar plantations, and none of them in operation, he has not had an opportunity of doing to the old sugar planters of the country that justice which they certainly would have obtained from him, if he had known more about them.

It is in order to destroy the unfavorable impression which some parts of the report may create against the progress hitherto made in our sugar industry, and also for the purpose of rectifying a few errors, which have crept in that otherwise unexceptionable work, that I would wish to see it reviewed in your useful periodical. I do not attempt it myself, because I am not in the habit of writing for the public; but I hope that the notes and suggestions which you will find in this communication, will induce you to undertake that task.*

Speaking of his journey from Havana to Guines and back, Mr. McCulloh says: "The well managed sugar estates (furnished with highly "finished and costly machinery) which I visited, and which had each "required, on an average, an investment of not less than two or three "hundred thousand dollars in fixed capital, had entirely dispelled from "my mind all preconceived notions derogatory to the enterprise and "intelligence of the Spanish Creole; though under an oppressive gov"ernment, and, compared with that of a Louisiana planter, enjoying "all the blessings of political freedom, exempt from heavy taxes, and "protected against foreign competitions by a high tariff." And after mentioning several improvements on a plantation in Cuba, he adds: "Such estates constitute exceptions, however; while for a very "large number, the arrangements and methods described by the author "of the *Histoire Naturelle du Cacao et du Sucre, published in* 1720. "the oldest treatise I have seen on the subject, would answer almost "as well for this day as that in which he wrote. And this remark, I "am sorry to say, is applicable equally to the State of Louisiana and "to the West India Islands; the use of the steam engine to grind "the cane and the substitution of the mill with horizontal in place of "that with vertical rollers, being almost the only improvement exten"sively introduced." (pp. 9, 38,)

It so happens that, in the beginning of 1845, my neighbor, Mr Lapice and myself took a journey through Cuba, for the special purpose of ascertaining whether there was in the island any improvement in the sugar manufacture of which we might avail ourselves. In our visit to Guines, we discovered nothing, either in the general management of the sugar estates, or in the buildings and improvements, which deserved peculiar praise. The mistake of Mr. McCulloh as to the value of the improvements in that neighborhood, has probably originated from his not being in the habit of seeing sugar estates and of estimating the cost of the improvements thereon. The Inganio La Amistad, which does not belong to Mersrs. Hiago, as it is stated (page 63) but to their sister, the Widow Ayestaran and her son, was the only estate in that part of the island which had improvements of

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* There is no man in Louisiana better qualified to review the report of Mr McCulloh than M. Valcour Aime. In such hands we freely leave it.

y great value; one of Derosne's apparatus having been put up there
e year previous. Mr. Ayestaran may, to prevent competition, have
en disposed to exaggerate its price, for I know that it was currently
ported in Guines that fifty thousand dollars had been paid for it;
t, as I made it my business to ascertain for what sum a similar ap-
ratus might be obtained, I also know that the price in Europe was
18,000; and I do not presume that the expenses of all kinds, to
ing it on the plantation could exceed $5,000, as no duty was to be
id on machinery imported into the island; so that the apparatus in
uines did not probably cost more than $25,000. The buildings on
e Amistad were extremely common, and so are, with very few ex-
ptions, most of the sugar houses throughout the island. If the
gar estates which the professor has seen near Guines had each
quired, on an average, as he was made to believe, an *investment of*
t less than two or three hundred thousand dollars, in fixed capital,
ur Northern fellow citizens might well have asked why we complain
r not getting four cents for our sugars, when the people of Cuba can
ford to give theirs for two cents, after undergoing such enormous
xpenses. The fact is that the improvements and buildings on our
lantations are more valuable, better constructed and generally much
ore lasting than theirs. The slaves by which their canes are culti-
ated are, in spite of the suppression of the slave trade, imported from
frica, at a cost which, on an average, does not exceed for each, the
rice in Louisiana of a good pair of mules. The climate permits
hese slaves to be worked with as few clothes as they were in the habit
f wearing in their native country. A patch of bananas, which when
nce planted gives every year a new crop from the sprouts, is all the
eding they require; whilst our slaves are generally, at least, as well
d and clothed as laborers are in Europe. Canes, in Cuba, ripen
uring fourteen or eighteen months and require no plowing, no ditch-
ng and hardly any weeding; their rattoons last fifteen and twenty
ears. Here, after having tilled our soil in a manner that no farmer
n the United States would be ashamed of, we must get sugar out of
ur canes, on an average, eight months after they have come out of the
round, and we must replant every second year. They grind six
onths in the year; we can hardly calculate on half that time to get
hrough our crops, and must, therefore, manufacture our sugar twice
s fast as they do theirs. With all these disadvantages on our side,
nd many more which it would be too tedious to mention, our planters
ake fully as many pounds of sugar to the working hand as can be
ade in Cuba. This shows conclusively to my mind, that we are not
in the arrear, as Mr. McCulloh seems to think. There is no branch of
ndustry in the United States for which more money is expended every
ear, in experiments, than for the sugar manufacture of Louisiana. If
ethods are adopted which may in many respects be considered faulty,
t is not because our planters know no better, but because they are com-
elled by our climate to adopt the most expeditious means of operation.
The great question with us is not how to make the finest sugar and
ow to make the most of it, but how to make it fast enough; we
now that frost may soon prevent us from making any at all. This is
he reason which has prevented the planters of Louisiana from ado

ing generally the improved processes for making sugar; most of the ameliorated machinery operates too slowly to save our crops, and the perfected apparatus which are not liable to that fault, are within the reach of very few fortunes. Although on account of our working more and better than the Cuba planters, we make as much sugar as they do. Mr. McCulloh might have perceived, if he had staid longer among us, that the first cost of the sugar must be about twice as much in Louisiana as it is in Cuba. It is perfectly true, as he says, that we enjoy the blessings of a better government; but among the advantages which he enumerates as flowing from that government, he might very well have left out in a report printed in 1847, the protection against foreign competition by a *high tariff!* That protection is now hardly three-fourths of a cent per pound, and with that help we have to contend not only against the West India Islands, but also against the Northern refineries. It is to compete with these last, as well as with the Cuba planters that the improvements made of late years in the sugar industry may be rendered available. We cannot, in my opinion, make profitably from the cane juice double refined sugar equal in whiteness and beauty to that made at the North; but what is the use of the superior whiteness when it creates no increrse in the demand? I am now making stan[illegible] loaf sugar of three pounds, which is worth from seven to nine and a half cents a pound, the average being about eight cents; and I can sell one hundred barrels of the quality quoted at sight against ten of that at nine and a half cents, With one of Derosne's or Rillieux's apparatus the Louisiana planter. instead of getting from three to four cents for his brown sugar, may get for it five or six; for, when I say that I obtain, on an average, eight cents for my white sugar, it must not be understood that I can make by means of the apparatus as many pounds of white sugar as by the usual process could be extracted in brown sugar from the same cane juice; the yield of white sugar is of course smaller, but the increase in price is more than a compensation for the diminution in the quantity. In other words, the same cane juice which, by the usual process, would yield a hundred thousand pounds of brown sugar, which, at four cents, would produce four thousand dollars, will, by means of the apparatus, give white sugar of different grades, for which from five to six thousand dollars may be obtained. This is certainly a handsome compensation for the additional trouble and the additional investment. It must, however, be understood as applying only to a well managed apparatus: for we had instances during the last season of planters doing worse with the new improvements, than with what Mr. McCulloh calls the old and faulty method.

At page 22 we find the following remarks: "It was my intention "to have devoted particular attention to the mucilage stated to be "in Louisiana cane juice, often in quantity so large as to give great "trouble to the sugar-boilers; and I regretted the circumstances which "impeded my journey thither more on that account than any other; "but I now attach less importance to the subject, for it has been shown "by Messrs. Benjamin & Packwood that the use of boneblack and of "evaporation in vacuo gives perfect results. Some planters had, I am "told, entertained the opinion before that boneblack could not be used ifying the cane juice of Louisiana; an opinion doubtless, pon unskilfull experiments."

lack has been used successfully on my plantation, for decolor- l purifying cane juice, ever since 1840. It is not every year mucilage in our cane juice is a source of annoyance to the In favorable years, when the canes are ripe and the ighs 9° Baume, and sometimes more, the mucilage gives very uble and prime sugar can easily be made. But in unfavorable and in canes raised in new lands, the juice gives sometimes l-2 to 7° and mucilage is found in large quantities; part of it nt before the sugar can be brought to the striking point, and t a red and inferior sugar can be obtained by the common pro- t is in those years and in these circumstances that boneblack re extremely valuable.

sing the importance of grinding at low speed, the report s results of experiments made by the Marquis de Ste. Croix, r of the Island of Martinique, who states that "with the same d its rollers set in the same way, the juice obtained consti- 5 per cent. of the weight of the canes ground when the rollers ix revolutions a minute, and 70 per cent. when the velocity and a half revolutions per minute; a difference of 25 per (p. 45.)

is, no doubt, something to be gained by regulating the speed cause the cane juice to flow off before the bagasse has passed the mill. But there is evidently some exaggeration in the t of the Marquis. Every practical man can feel that if the of revolutions made by the rollers could produce a difference r cent. in the yield of the cane, the planters would soon per- necessity of so setting their mill as to make with the same instead of four hundred hogsheads. Four revolutions in a ith rollers of 28 inches diameter, is quite slow enough; the slower motion must be a trifling one. As far as my experi- s, I have seen ten cart loads of good cane yield a thousand f sugar, and I never perceived that the result was materially when the mill made one or two revolutions in a minute.

acknowledging the purity of the sugars refined by the large ments in the United States, the professor observes: "In the of G. S. Lovering & Co., a process is employed for the clari- peculiar, I believe, to that establishment, which has been icated to me confidentially, and which I consider perfectly tionable; neither alum, bullock's blood, nor any other objec- substance being there used for clarification in making sugar ly pure and of extreme whiteness and beauty." (p. 51.)

G. S. Lovering & Co., are not the only ones in possession process. Ever since 1834, I have been clarifying without d without blood, or any noxious ingredients: the sugars of ntlemen may generally surpass mine in color, but I can at m an equal purity.

having mentioned the importance of preventing fermentation rine juices, its effects on our canes are thus noticed: "In , when the cane has been exposed to severe frost, follow weather, the juice, it is said, becomes acid, and so alte that it is impossible to make sugar from it in the ordinary way. In defecation it becomes mucilaginous and ropy, and yields not a particle of crystalline sugar. Do not the changes of temperature cause the cellular tissue of the cane to be ruptured, and thus bring together the nitrogineous matter and the saccharine juice under circumstances which excite viscious or lactic fermentation? I may here add, that during the last year, excellent sugar is said to have been made by Messrs. Packwood, Benjamin, and C. Degruy, by the use of the Rillieux's Apparatus, from acid, frosted cane juice, which, by the ordinary method would, it is stated, have yielded molasses only." (p. 65.)

It is true that fair sugar can be extracted from frosted canes, by means of bone black filters and the vacuum pan, when only a very inferior article could be obtained by the common method. The canes, when frost-bitten, can thus be rendered profitable for a few days longer. This is not, however, the peculiar advantage of Rillieux's process; the same result can be obtained by means of Howard's, Roth's, Derosne's, or any other system for evaporating in vacuo. I have seen at Mr. Lapice's, sugar of a good color and grain, made by Derosne's Apparatus, which was so very sour as to excite a disagreeable sensation on the tongue; when the sugar was drained the acidity disappeared, because it was confined to the uncrystalized part. But after the deterioration of the canes has so far progressed that the juice, when boiled in open pans, produces in the battery or teache nothing but a viscious syrup of fine yellow color, from which, by the common process, not a particle of grain can be obtained, I contend that no apparatus can crystalize it. In the winter of 1845–6, the pneumatic pans or tigers constructed by Rillieux on Messrs. Benjamin and Packwood's plantation having completely failed, those gentlemen, to save their canes, had to work the whole of their crop into syrup, which, afterwards, was manufactured at Mr. Oxnard's refinery. I have there seen in that refinery, syrup manufactured from frosted canes by Rillieux's Apparatus, from which nothing could be made: other syrup coming from canes less deteriorated, produced sugar resembling common wax, while all the syrup obtained by the same means, previous to the canes being frosted, or before the juice was quite altered after the frost, has produced in the same year and at the same refinery, sugar of the very first quality. It is much to be regretted, that Mr. McCulloh had no opportunity for examining the phenomena which present themselves successively during the process of the fermentation of our cane juice. I have seen nowhere clearly explained why frosted cane juice, from which good sugar can be produced for several days, even when sourness is quite perceptible to the taste, ceases to granulate, sometimes in the space of a very few hours. In the paragraph quoted above, the Professor seems to intimate that acids of different kinds may be generated in the course of fermentation, and he is probably right. I am no chemist, but I have learnt from one who has turned much of his attention to the manufacture of Louisiana Sugar, that whilst there are acids, such as the hydrochloric, the lactic, the citric, &c., which prevent granulation, the acetic acid is so far acting against it that some confectioners use vinegar to aid the crystalization of rock candy.

The thermometer is recommended in the strongest terms, as the best, and, indeed, the only means of obtaining definite and precise knowledge in reference to the evaporation of concentrated syrups: "The thermometer is used for the determination of this striking point only by those who boil in vacuo, and by a few who employ open pans; and most of the sugar manufacturers depend entirely upon certain signs or appearances which become familiar to the workmen by practice." (p. 100.)

In the next page he declares that he is quite sceptical in reference to the force, and even the honesty of the objections, urged against the use of the instrument, which furnishes a ready and perfect means of knowing whether the concentration approaches the striking point. He ascribes these objections to the prejudices of ignorant workmen employed in the manufacture of sugar, which, as he says, "has been confided chiefly to negroes, and scarcely less stupid and ignorant white men." (p. 101.)

The thermometer is advantageously and generally used, to judge of the state of concentration of the syrups, in open evaporating pans, heated by steam, but the use of that instrument to ascertain the striking point in the manufacture of vacuum pan sugar is a practice not to be thought of. Syrups coming from the blow tubs and leaf filter at 32 deg. Beaume, is often at 150 deg. Fahrenheit, when put in the pan. It rises in fifteen minutes to 160 deg., and may be kept at that point for several hours, until it reaches the proper degree of evaporation; indeed, if the boiler has at his disposal a large supply of water, he may, by the injection of cold water, lower the temperature while the concentration is progressing, and this is commonly done when it is considered desirable to obtain a large and solid grain. The thermometer is employed in the vacuum pan to keep the boiler advised of the heat he has in it, and enable him, in conjunction with the air glass or barometer, to regulate his pan as to steam and water, for striking the test by the touch with the proof stick is the only one that can be depended upon.

The sugar made by Messrs. Benjamin and Packwood is noticed in the following words: "A specimen of this sugar presented to me by Messrs. Merrick and Towne, has been analyzed by me, and found to be *chemically pure.* Its crystalline grain and snowy whiteness are also equal to those of the best double-refined sugar of our northern refiners. To Messrs. Benjamin and Packwood must, therefore, be awarded the merit of having first made directly from a vegetable juice, sugar of absolute chemical purity, combined with perfection of crystal and color. This is indeed a proud triumph in the progress of the sugar industry. In the whole range of chemical arts, I am not aware of another instance in which a perfect result is in like manner obtained immediately." (p. 121.)

I am so far from being disposed to detract any thing from the merit of Messrs. Benjamin and Packwood, that I would not have the least objection to their being represented as having originated a most important improvement in the manufacture of sugar, if the old planters of the State were not thereby cast rather too much in the shade. The stay of Mr. McCulloh in the State was, as I observed before, so very short that he had no time to become well acquainted with the former situation of our sugar industry. and the various successful steps that have been taken to improve it. It is no doubt on that account that he has in the different parts of his Report alluded somewhat unfavorably to our improvements.

It is not of late years only, that white sugars, derived from the cane juice, have been made with more or less success in Louisiana As far as I can remember, and I am no longer a young man, I recollect to have seen white clayed sugar made on many of our plantations, for home consumption at least, by the same operation which, in Cuba is carried on, on a large scale. Another grade of sugar was made about eighteen years ago by Mr. T. Morgan, who, as the report correctly states, was the first to introduce the vacuum pan in this country for the evaporation of cane juice. A few years afterwards he obtained by liquoring in moulds, without the use of bag filters, good white sugar Neither filters nor defecators were employed in connection with Rillieux's apparatus, when Mr. Packwood, in the winter of 1843–4, made with it about thirty hogsheads of sugar. In the succeeding season defecators and bone black filters having been added to the same apparatus, prime brown sugar was obtained, without any refining process, on the same estate. The specimen of sugar so highly eulogised by the report, was produced in the winter of 1846–7, on Messrs. Benjamin and Packwoods' plantation, by using Rillieux's perfected apparatus, and liquoring the sugar in tigers.

Although it may look like egotism for me to say so, yet I cannot avoid remarking that since 1834 I have been making clarified, stamp, and loaf sugar, directly from a *vegetable juice*, and that since 1840. when I first used bone black filters, my sugar has been at least equal for purity, as well as perfection of crystal and color, to that manufactured in 1846–7, by Messrs. Benjamin and Packwood.

As it may not be uninteresting to be informed of the different trials of one who has some claim to be considered here as the pioneer in refining sugar from the cane juice, permit me to state that, after having attempted, without success, some expensive experiments for making white sugar in 1830, I tried, in connection with a common set of kettles, in 1832 the bascule pan, and in 1833 the serpentine tub, and ascertained that, with good canes, no definite advantage can be derived from either. In 1834 I bought moulds, procured the bag filters of Taylor to filter my cane juice when boiled in the common kettles to 30 deg. Baume, ordered from London one of Howard's vacuum pans, from the old makers, William Oaks & Son, and began to refine. It would be too tedious to detail the trouble I experienced and the accidents and mistakes from which I had to suffer during that winter; I was so much annoyed that I would certainly have given up my experiments, at least for that year, if my sugar house had not been so altered as to put it out of my power to proceed by the common method. I had to refine or lose my canes. The final result was upon the whole satisfactory, and I not only got through my crop of 340,000 pounds, but bought some inferior sugars from the neighborhood, which I also refined. I obtained 12 cents a pound for my loaf sugar, which was of course inferior to what I make now, since I used no bone black. From 1834 to 1339 inclusive, every one of my crops were worked in same way, with the only difference that the experience acquired h every additional year enabling me to understand better how a nery ought to be conducted, I increased mine and managed it more veniently. Having heard in 1840 of the filter Peyron, represented working continuously, and without renewing the bone black, I sent boiler to Europe, at an expense of eight or nine hundred dollars, examine and procure it, if found to answer. He came back in time the crop, not with Peyron's filter, however, but with another on mont's plan, which is employed in England. The syrup of that ar being first filtered in the bags and passed afterwards over bone ck, produced sugar which was fully worth two cents more than that had previously made. I effected no other important change in my finery until 1845, when I procured Derosne's apparatus, with some difications, in the pans and distributions. On account of the air mp having been made too weak, I could manufacture but a small rt of the crop of that year, but in the succeeding season I used noing else, and have since that time ceased to boil my syrup in open ttles. I find that I make by that means still better sugar; although, account of the quantity now produced, not only in this State, but the north and west, I get much less money for it.

In the year 1846, Mr. Lapice put up one of Derosne's apparatus, ich was, like mine, made at the Novelty Works, New York.

The main difference which can be found between the means emyed by me since 1840 for refining, and those Messrs. Benjamin and ckwood used in 1846, consist in this: that those gentlemen liquor eir sugars in tigers, while I do so in moulds; but this difference can, course, create none either in the quality or beauty of the sugars. e only question to be raised between the two processes, is one of onomy and of time; in this, practical men may differ. In 1845, ter examining, in company with Mr. Lapice, tigers on the plan of ose since constructed by Messrs. Benjamin and Packwood, which we und in the refinery of Mr. Adams, near Matanzas, in Cuba, I deterined to keep to my moulds, and Mr. Lapice came to a different conusion. He had tigers made, which worked well in 1846, and he has ed them successfully ever since. They can undoubtedly be consided as a valuable improvement, which may be rendered as profitable ere as it has been for a great many years in the West India Islands. ugars may, by that means, be sooner prepared for market, and on at account those who have to put up new establishments for refining ught probably to adopt tigers in preference to moulds; but I do not hink that the advantage to be derived from them is sufficiently great o induce those who are already provided with moulds, to give them up.

Art. VII.—THE ZOLL VEREIN.

The Prussian Commercial League, as it has been named by Mr. McCulloch and other writers upon political science, is the result of the highest sagacity, intelligence and wisdom. Designed for the diffusion of an enlarged commercial system among the many principalities and

States into which Germany is subdivided, it has been found most fully to answer the purposes of its creation by the enlargement of the field of enterprise and the scope of action. Under the state of things which existed previously to the period when this confederation was formed, commerce was fettered in her free thought and jarring interests paralyzed the arms of industry. History assures us that leagues were early established in Germany, with the view of preventing disorder and of securing the smaller States from the encroachments of the larger. The Old Hanseatic League, with a power and influence long acknowledged throughout Europe, is rich in the lessons of experience which it has furnished; and in the purposes and objects of its establishment differs in no material point from the plan proposed for the adoption of the contracting parties to the Zoll Verein, as appears by their Customs Treaty. If the opinion can be sustained, that the object of Prussia in forming the union was a political one, designed for the better advancement of her single interest, weight and influence in the scale of nations, the resemblance must be more clearly manifest. The parallel is not lost in the rapid attainment of power achieved by the Hanseatic League during the period of its existence, though we should deeply regret that the high degree of improvement it had so generally promoted, and to which in no small degree was its decline to be attributed, should produce like results to the existing confederation.

With no unity of political action in the seperate bodies composing the Germanic States, a conviction of the necessity of such a union could not be long in forcing itself upon the minds of the people. The arguments which conduced to the establishment of the German Confederation, based upon political interests, and headed by the Austrian Empire, the object of which was avowedly "the maintenence of the independence and integrity of the respective Germanic States," had existed for several years previously. Experience had demonstrated the incapacity of the old Germanic constitution, tottering with age and bearing within it the internal elements of decay, to answer the wants of a people who were beginning to assert their proud claims to the world's high regard and consideration. This was overthrown in 1791 and the Confederation of the Rhine established by Napoleon soon after the battle of Austerlitz. It is not our purpose to travel beyond the limits we have assigned to ourselves to speak of the "historic eccentricities" of Germany, so often imputed to her by the neighboring nations of the continent. Though not properly within the sphere of our subject, we have suffered ourselves thus far to digress, from the too common custom in this country to confound these two leagues, and in the principles which govern the one, to infer results which should more properly attach to the other.

In 1818 and 1819 the first treaty was negotiated by Prussia with the Principalities of Schwarsburg, Sundershausen and Schwarsburg Rudolstadt, and from this epoch we are to date the history of the League now known throughout the world as the Zoll Verien, and comprising within its broad limits, three-fourths, if not more, of the Germanic States. It was not until 1828 that Ducal Hesse joined the alliance, and three years after Electoral Hesse lent the force of her name and numbers to swell the influence of the Confederation. Its

, however, has always been onward in the march of commer- atness, often leading in measures of reform calculated to the spirit of enterprise and dispel the delusions which have restricted the free commerce of nations.

ictions upon trade are never so destructive to the rapid of a nation in wealth or in greatness as when they are felt nternal economy. While each State possesses a tariff, a cus- use and all the parapharnalia of independent government, it arcely be hoped, the most vaxatious embarrassments would not the bold operations of trade. The peculiar and favorite inte- one section rendered indispensable in the judgment of its he imposition of a tax upon one article which, in another, it e necessary to admit at a higher or lower duty. And so of ions upon articles the production or manufacture of the differ- tes.

article by the writer, on "American Tobacco," in the October the Commercial Review for 1846, this subject was briefly ad- o. We extract the following:

> gh the leading power in the union, Prussia is unable to undertake any hout the sanction of the other States. To carry a resolution, it is neces- t *all* agree. Frankfort-on-the-Main, the least important State of them gh she may not originate and execute a measure, has at least the power, olding her consent, to render inoperative the will of all the others com-

following is believed to be a correct list of the German States ompose the Zoll Verien with the population of each annexed.* be well to mention incidentally that half a million is computed e average yearly increase in the population.

l Verein is composed of the following sovereign German States:

es which acceded with their whole territory—

	Population at the end of 1843.
Kingdom of Prussia, - - - - - - - - -	15,471,765
do. Bavaria, - - - - - - - - - -	4,439,067
do. Saxony, - - - - - - - - -	1,757,800
do. Wurtemberg, - - - - - - - - -	1,680,798
Grand Dutchy of Baden, - - - - - - - - -	1,328,255
do Hesse, - - - - - - - - -	834,711
Electorate of Hesse, - - - - - - - -	709,834
do. Saxe Weimer of Eisenack, - - - - -	252,833
Dutchy of Nassua, - - - - - - - - - -	412,271
do. Brunswick, - - - - - - - - -	256,000
do. Saxe Meiningen, - - - - - - - -	156,930
do. Saxe Coburg Gotha, - - - - - - -	144,045
do. Saxe Altenburgh, - - - - - - - -	125,342
do. Anhalt-Dessau, - - - - - - - -	62,691
do. Anhalt-Berneburgh, - - - - - -	46,929
do. Anhalt-Kœthen, - - - - - - - -	42,106
Principality of Lippe Detmold, - - - - - -	103,493
do. Schwartzburg Rudolstadt, - - - - - -	68,891
do. Waldeck, - - - - - - - - -	58,753
do. Schwartzburg Sondershausen, - - - - -	57,909
do. Reuss Lobenstein-Ebersdorf, - - - - -	52,270

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beg to make our acknowledgments to the "National Intelligencer" for we have made of the statistics with which they were furnished from offi- rces.

22. The Principality of Hohenzollern Sigmaringen, - - - -	42,887
23. do. do. Shanhenburg Lippe, - - - - - -	37,738
24. do. do. Reuss-Greitz - - - - - - - - -	33,803
25. do. do. Reuss-Schleitz, - - - - - - - -	28,613
26. do. do. Hohenzollern Hechingen, - - - - - - -	20,143
27. The Landgrave of Hesse Homburg, - - - - - -	24,863
28. The Free Town of Frankfort-on-the-Main, - - - - -	65,831
B.—States which acceded with only part of their territories—	
1. The Kingdom of Hanover with the county of Hohenstein—the Bailywicks Elbingrode, Polle, Falleraleben, (southern part,) and some parts of the Bailywicks of Gifhorn, Knesebeak, Woltingerode, Peine, and on the Harz mountains, with the villages of Brockenkrug and Oderbuck, - - - - - - - -	27,660
2. The Kingdom of the Netherlands with the Grand Dukedom of Luxemburg, - - - - - - - - - - - -	179,904
3. The Grand Dutchy of Mecklenburg-Schwerin, with the villages of Rossow, Netzeband, and Shonebeck, - - - - - -	1,063
4. The Grand Dutchy of Oldenburg with the principality of Birkenfeld, - - - - - - - - - - - - -	29,480
	28,548,553

The History of the States forming the Zoll Verein is so full of romantic incident and exciting novelty, that we doubt whether there is a spot which has not been consecrated to some giant achievement in science or wide spread renown in arms. We may certainly then be pardoned should our thoughts become restive under the restraints which the cold and uninteresting speculation upon facts and figures necessarily impose, and occasionally diverge from the plain path of our investigations to repose awhile amid the enchanting scenery which surrounds them. Where is the man with but a spark of "poetic fire," who could bury his mind in the solution of an abstract commercial problem as he journeyed upon the banks of the Rhine;

"And all its thousand turns disclose,
Some fresher beauty varying round."

We may not linger, however, among the scenery which the sunlight of poetry has made radient with beauty, or longer gaze upon the many castles which are mirrored upon the clear and shining surface of this beautiful stream. The pen of genius has thrown a fascination around her, which time nor memory can ever destroy.

Adieu to thee again! a vain adieu!
There can be no farewell to scene like thine;
The mind is colored by thy every hue;
And if reluctently the eyes resign
Their cherished gaze upon thee, lovely Rhine!
'Tis with the thankful glance of parting praise;
More mighty spots may rise—more glaring shine,
But none unite in one attaching maize
The brilliant, fair, and soft—the glories of old days.

We proceed now to give such slight account of the various States forming the union as we have been enabled to gather from the very imperfect information attainable upon the subject, previously to an examination of the articles of the Customs Treaty.

orant of the fact that not until 1700 did PRUSSIA attain
of a kingdom. Since that period her power and influ-
a augmenting; the rule of Frederick the Great assisted
in no slight degree, till we find her at the proclamation
peace in 1815, more powerful than she had ever been,
tions which were made to her of Pomerania, Saxony and
of the Rhine.

which have already been made apparent, it is exceed-
to ascertain with anything like precision, the commerce
h foreign nations, and the free intercourse and commu-
en the States forming the League is scarcely calculuted
ivestigations. Mr. McCulloch experienced this difficulty
tion of his great work, "The Commercial Dictionary,"
the highest authority among the ablest writers in all
he onerous restrictions which for a long time obstructed
of the Rhine and the Elbe, have, within a few years,
, and the most beneficial results are manifest in the
these rivers, while the establishment of steam packets
no slight degree to an improved condition of trade.

al seaports of Prussia are Koningsberg, Dantzic, Stetten
tralsund. The proud position which she occupies in the
oth as regards commerce and letters, and the struggles
to throw off the iron rule which has for so long a time
opeful energies of national enterprise, have engendered a
tigation and enquiry, which promises the brightest pros-
future. In the peaceful pursuits of trade, she is not
the preparations necessary for a successful defence in
t has been said, and the remark belongs not to antiquity,
is a camp—the nation is an army. It must be extin-
disbanded."

ages Prussia was celebrated for its production of *succin*
ost remarkable phenomena, to which no place has been
e empire of nature. To what cause we are to attribute
as not to have been fully established. Its value appears
ery great, as at an early period the Phonicians navigated
s in its search. Turkey is at present the staple market
odity.* The town of Wittemberg, in Prussia, contains
Luther and his friend Melancthon, while to Eisleben
onor of having given birth to the great Reformer. The
Andrew and the pulpit from which he menaced the
l to be seen.

es which we will have occasion to present to the reader
the trade of the Zoll Verein, will, we think, exhibit in
light the extent of the consumption of sugar and coffee.
we would but advert to the fact that beetrave sugar has
ly cultivated in Prussia, notwithstanding which, the im-
oth these articles are exceedingly large as compared with
s.

om of BAVARIA, with the exception of Prussia, the

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[*] Malte-Brun's description of Germany.

largest power in the League, covers an area of about 6,363,000 acres of ground. The principal products of manufacturing industry next to beer, the consumption of which is so great that it is the occasion of its having been remarked "that when you see a Bavarian peasant not working, you are sure to find him with a can of beer in his hand," are coarse linens, cottons, woolens, leather, paper, &c. In 1835 the first railroad was introduced upon the continent, between Nuremburg and Furth, and though similar projects have been started in other parts of the kingdom, encouraged by the success which attended this enterprise, up to a very late period it was the only one of the kind. There is a canal, however, which connects the Danube with the Rhine, and a steam communication between Ratisbon in Bavaria, and Linz in Austria, established by a joint stock company in 1838. The yearly exports of the kingdom are estimated by Hohn at 14,000,000 florins, equivalent to about $5,400,000 in round numbers.

The imports consist principally of sugar, coffee, spices and dye stuffs, cotton stuffs, silks, woolens and fine manufactures of all kinds, drugs, flax and hemp. The proportion which Bavaria receives of the revenue of the Customs' Leagues is 16-94 per cent. Notwithstanding the marked improvement in the condition of the German States and the enlargement of their commerce through the wholesome and salutary action of the Custom League, these manifestations do not appear to have extended to the Bavarian constitution. In discussing the local relations by which the people are controlled, an able writer upon this subject indulges in the following remarks:

> "The English reader will be surprised to learn, that here the number of laborers permitted to reside in town, the number and distribution of trades, the prices of bread and meat, and even the introduction of new machinery are all determined by artificial arrangements, dependent on the calculations and estimates of the Minister of the Interior, and enforced by the institution of passports and of a preventive police!"

We would be disposed to place in the same category the restraints imposed by government upon those who may be disposed to migrate, as the exercise of a refined cruelty, but that a more obnoxious law, in any aspect we may be pleased to view it, is even at this moment staring us in the face. That "*no marriage between people without capital, should be allowed without the previous permission of the poor institutions;*" would, we doubt not, meet the hearty approval of Mr. Malthus, who measures the higher instincts of nature and the nobler feelings of the heart by the cold principles of a political economy, incapable of being exalted above the consideration of dollars and cents.* A long course of dependence upon the government in which the "germ of virtue" is suffocated, to use the language of Mr. Jefferson, could alone have tolerated for so long a period the infliction of this monstrous wrong. At Munich half the births are said to be illegitimate.*

The annual export of cattle from Bavaria is very large, consisting of horses, horned cattle, sheep and hogs. The last is very much esteemed by the inhabitants for food. Nurenburg, a city of consideable distinction, the birth place of Albert Durer, the painter, is the scene of many discoveries in science. We quote from Malte-Brun:

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* However high the authority upon which this assertion rests, we are bound to regard the statement as in a measure exaggerated.

> "Peter Hale invented watches there, Rudolph the drawing plates for iron wire, John Lobsinger air-guns, Christopher Deuner the clarinet, Erasmus Ebener the alloy known by the name of brass, and Martin Behaim the terrestrial sphere, which, without doubt, contributed to the discovery of America."

THE KINGDOM OF SAXONY is one of the most important powers in the League. Early renowned, not more for feats of arms than the extent and value of its commerce, the consideration to which it attained in early time, has been yearly increased. The intelligence which pervades the agricultural population, is the warrant for the high degree of improvement visible in this branch of industry, while the restraints imposed upon commerce in other portions of the world are without their influence here. Hemp and tobacco are successfully cultivated. Leipsic is the capital of the kingdom, and Chemnitz the birth place of Puffendorff. Its constitution and government would furnish a model for the sage legislators of more powerful empires.

According to Dr. Bowring, in his Report on the Prussian Commercial League,[*] the most important branch of manufacturing industry in Saxony is cotton. The proficiency to which it has attained, is ascribed to the introduction of the potato, which enables the weavers to afford their labor at a cheap rate from the comparative cheapness of food. Between 1830 and 1837, the spinning establishments had increased in number 38, with 490,325 spindles. Efforts are still being made to improve the construction of machinery, and new factories are constantly rising to augment the power and wealth of the kingdom. Printed calicoes are produced at a lower rate in Saxony than in England, though the quality and coloring of the goods are considered to be inferior. In cotton hosiery they are enabled to compete with the British manufacturer in foreign markets, and their peculiar adaptation to this branch of manufacture has ceased to be regarded as at all doubtful. The very small outlay of capital necessary for its encouragement, and the independent position of the laborers, have greatly contributed to its prosperity. The manufacture of linen is another important element in the wealth of the country, in which there were employed in 1837 from 12 to 13,000 looms, and about 3000 persons. The wages paid a weaver per week on linen goods, is from 2*s.* to 2*s.* 4*d.* The manufacture of woolen in Saxony promises the highest results, and though we are led to infer that the Saxons are, as yet, much inferior to the English in this branch, we cannot fail to be struck with their deep solicitude for its encouragement and promotion, as evidenced in the erection of SCHOOLS OF MANUFACTURE at Dresden, Chemnitz, Planen, &c. In all measures of this character, so well calculated to awaken public attention and direct the mind to the contemplation of great issues, the States of the Zoll Verein have, in recent times, been proudly pre-eminent. To Saxony, in an especial degree, has the union been productive of the highest benefit. It opened to her a market for her manufactures, which had previously supported but a sickly and languishing existence. This fact is happily illustrated in the Report, a portion of which we extract:

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[*] As we shall find occasion, perhaps, to draw largely upon the facts embodied in the Report presented to Parliament by Dr. Bowring, we beg to acknowledge our obligations once for all.

> "The progress of the Saxon cloth manufactures in the three years from 1834 to 1837, is stated in an official report to have been greater than in the thirty years preceding! Great improvements have been introduced, not only in the fabric, but in the finish of the woolen goods, particularly by the introduction from the Netherlands of a new steam brushing machine. In 1839 the woolen manufacture employed from 3000 to 4000 looms, which produced about 160,000 pieces of cloth. The Jacquard loom is gradually being introduced."

Leipsic, with perhaps few exceptions, may be considered the greatest literary emporium in the world.

The breeding of sheep form the occupation of a large proportion of the people of Saxony, and it may be questioned whether any other portion of the globe have been more prominent in improving the stock. It has been computed that in 1837 there were 2,000,000 of sheep in the kingdom.

THE KINGDOM OF WIRTEMBERG, one of the secondary States in the German confederation, is divided into four circles, with a population in 1838 of 1,649,839, showing but a slight increase in 1845, as appears by the table furnished in the preceding pages. Its name is derived from a large castle near Stuttgard.

Its manufactures are principally of cotton, wool and linen. The exportation of wines, grain, leather and wood, to France, Austria and Bavaria, form the principal part of its trade. The little village of Laichingen boasts 400 hand looms, producing annually 400,000 ells linen. A uniform system of weights and measures, founded on the decimal division, was early established in the Kingdom. In reference to Wirtemburg, Mr. Loudon, in a letter to Count Lasteyrie, uses the following language:

> "From what I have seen of this country, I am inclined to regard it as one of the most highly civilized in Europe. I am convinced that the great object of government is more perfectly attained here than even in Great Britain; because, with an almost equal degree of individual liberty, there are incomparably fewer crimes, as well as far less poverty and misery."

GRAND DUCHY OF BADEN.—For a long period the inhabitants of this State devoted themselves almost exclusively to the pursuits of Agriculture. The natural productions of the soil are corn, barley, wheat potatoes, flax, hemp and tobacco. Manufacturies have been much increased since the accession of Baden to the Prussian Customs' League.

GRAND DUCHY OF HESSE is especially an agricultural country. No extended scale of manufactures can be said to prevail, though silk weaving has, to some extent, engaged the attention of the people. This State holds the ninth rank in confederation.

THE ELECTORATE OF HESSE holds the eighth rank in the German confederation, and is said by Mr. McCulloch to be the most richly-wooded country in Europe, nearly one third of its surface being covered with forest. The best tobacco grown in Germany is produced in this State, besides large quantities of wheat, rye, barley and oats. The principal manufacturing, as well as commercial towns, are Cassel and Hanau. Linen, cloth and yarn, hides, paper, hats, jewelry, sheep skins, iron and steel ware, form the principal articles of export. The imports are of drugs, wine, flax, hemp seed, silk, wool, and woolen fabrics, herrings, horses, cattle, tin, gold, silver and tobacco. To become a grocer, it was previously required that the applicant should be deprived by, bodily infirmity, from pursuing any other employment, but we are of opinion that the constitution established after the revolt in 1830 annulled the restriction.

Saxe Weimer of Eisenack, is one of the most important of the minor Saxon States. It is divided into two circles, that of Eisenack being the most prominent in manufacturing industry. The town of Weimer, the capitol of the State, with a population of near 12,000, has been fitly denominated the Athens of Germany. Goethe, Schiller, Herder and Weiland, have consecrated its name in the history of letters. The two first repose on each side of their great patron, the Grand Duke, in the new cemetery attached to the town. It was also the birth place of Kotzebue. We crave the forbearance of the reader while we make an extract in this place from Granville's travels:

> "One of the principal objects of notice in Weimer is the *Landes-Industrie Comptoir*, a vast printing and publishing establishment, in which a great many persons are employed in translating such foreign works as are likely to be read in Germany; and such is the rapidity with which this office is performed, that frequently the translation of a book published in London at the beginning of one month, is in full circulation by the end of the same month throughout Saxony and the Independent States of Germany, from the press of the *Landes-Industrie-Comptoir*."

The Duchy of Nassau is distinguished more particularly for its agricultural over every other department of industry. Wheat, corn, barley and potatoes, form the chief products, except in the district of *Rheingan*, where almost exclusive attention is given to the vine. The chief branch of manufactures is in metals; linen and woolen cloths; carpets, &c., are woven to some extent, though not on a scale sufficiently large to admit of export. The University of Gottingen has been constituted the high school of the Dutchy.

The Duchy of Brunswick, with that of Nassau, ranks as the thirteenth voice in the German confederation. The agricultural products are corn, of which it is estimated by Vollguth, the yearly average is 575,000 qrs., flax, tobacco, madder and hops. The manufactures are of linen, woolen and hardware. As in Nassau, the University of Gottingen is also the high school of the Dutchy. The spinning wheel was invented here.

The Duchy of Saxe Meiningen, described by geographers as a "crescent-shaped territory," is dependent upon its forest and cattle as the chief sources of its wealth, though manufacturing in cotton, woolen and hardware is carried on to a limited extent.

The similarity of pursuits in the population of the smaller States obviates the necessity for any more particular description of the sources of wealth than have been furnished in the previous pages. The peculiar position, however, which was occupied by Frankfort-on-the-Maine for so long a period, as a distinct republic in the heart of the German confederacy, to which, even at this time, she has not acceded with her entire territory, must invest her history with peculiar interest in the eyes of other nations. In works of art and the treasured mementoes of an age over which the charm of romance is found to linger, Frankfort is still rich. One of the oldest cities in Germany, it boasts a commerce which entitles it to the high rank of being one of the four great emporiums for the supply of Germany with all kind of merchandise. We quote from the Report of Dr. Bowring on the German Customs League:

> "Its merchants commence business at six or seven in the morning and toil till ten or eleven at night, not having yet attained to that methodical celerity, which in London despatches a hundred times the amount of affairs between, the commodious hours of nine and six."

We may add here, nor in America, where in almost any of the cities of the Union, but in New Orleans particularly, between the hours of 9 and 3, a larger amount of business is disposed of than during a day in London. We speak of transactions in point of numbers, not extent. Carpets, table covers, woolen, cotton and silk stuffs, tobacco, etc., are the chief manufactures of Frankfort. It claims to be the birthplace of Goethe, as it certainly is of the family of Rothschilds. That the first German Gazette should have been published within its walls, attaches to it in our imperfect conception, a far greater and more abiding interest than that it should have given birth to Charles the Bald, or that as early as 794 Charlemagne should have held a Council there.

We might have extended our remarks to far greater length, were we not admonished by the fact, that the time already consumed and the necessity which exists for some general views touching the treaty upon which the League is founded, forbid the indulgence. To the treaty, then, we propose to direct our attention, in the hope of presenting to the reader, in a clear and condensed form, some of the leading principles which it embodies, and to which, in a very important degree, is the large increase in the trade of the German States to be ascribed, as will appear in the tables we are now about to present to the reader:

Statement of several articles, chiefly the products of the United States, imported into the German Zoll Verein in 1845, showing the principal channels by which imported.

Imported by way of	Cotton.		Tobacco in Leaves and Stems.	Rice.	Whale Oil.
	Raw Cotton.	Cotton twist and wadding manuf'red in G. Brit.			
	Quintals.	Quintals.	Quintals.	Quintals.	Quintals.
The Prussian ports on the Baltic sea	24,210	2,652	14,839	103,708	205,931
Hamburg, (on the Elbe) - - - -	211,117	307,680	62,527	30,620	50,455
Bremen, (on the Weser) - - - -	78,447	47,515	148,235	13,409	64,801
The Netherlands, (on the Rhine) -	152,901	94,989	149,639	53,834	118,434
Belgium, - - - - - - - - - -	47,839	60,359	11,123	15,250	21,606
Havre, via France, into the Grand Duchy of Baden and the Kingdom of Bavaria, - - - - - - - - -	34,874	71,965	16,372	27,248	301
Total amount of importation, - -	549,388	585,160	402,735	244,079	461,528

The articles enumerated in the table above, are chiefly the products of the United States. The amount of cotton twist and wadding manufactured in Great Britain and imported into the Zoll Verein have, however, been incorporated. Whether the quantities passed through the numerous Custom-Houses, which line the frontier, were imported through Hamburg or Bremen, is not ascertained.

The table which follows sufficiently explains itself:

Statement of several articles, chiefly the products of the United States, imported, re-exported, consumed, and on hand, in the German Zoll Verein in 1845; *also the value of the consumed articles, their average prices, rates of duty, and the revenue derived therefrom.*

Articles.	Imported.	Re-exported.	Consumed and on hand. Quantity.	Average prices at the Hanse-Town.	Value.	Duty per Quint.	Revenue derived from.
	Quint.	Quint.	Quint.	Dolls.	Dolls.	Dolls.	Dolls.
Raw Cotton, - - -	549,388	105,501	443,887	13.00	5,770,531	Free	
Cot. twist and wadding man'f'trd in Great Britain, -	585,160	10,857	574,303	26.00	14,731,878	1.38	792,540
Tobacco in leaves and stems, - - -	402,735	12,346	390,383	4.50	1,756,724	3.80	1,483,460
Rice, - - - - - - - -	244,079	89	243,990	5.35	1,305,346	1.38	336,710
Whale Oil, - - -	461,528	24,257	437,271	6.30	2,754,810	0.35	153,060
Total amount, - - -					26,519,289		2,725,760

The duty on cotton twist was raised from two to three Prussian dollars in the early part of 1847; equivalent to 69 cents. From this table we discover what has become of the imports exhibited in the one which preceded it, together with other and important particulars regarding their value, rates of duty, &c. The calculations of the value of the imports are based upon the average prices in the Hanse Towns, on their importation into which but 1-2 per cent. ad valorem duty is paid.

We would observe, however, that in consequence of the comparatively moderate duties imposed upon the importations in the Zoll Verein, the exports from the United States have largely increased. It will be seen by the above table, that the consumption of rice is very large, that of raw cotton has been augmented to a great extent, and tobacco finds a larger market in those States from the fact we have already stated. In the Washington *Union* we meet with the following regulations, recently established by the Customs' Union, and as they have particular reference to the articles of which we have just been speaking, tobacco and rice, we submit them for the guidance of those interested in this trade. They are embodied in a letter from "Schwerin, Germany," bearing date 20th October, 1847:

"The tare on a hogshead of tobacco is 12 per cent. If the hogshead should weigh over 12 per cent. for the quantity of tobacco contained in it, the additional weight pays duty at the rate of 5 1-2 Prussian thalers per zoll centner—equal to about $3 33 cts. per 100 lbs. Hogsheads which contain about 1000 lbs. tobacco weigh. in the aggregate, I have been told—some more and some much less—200 lbs.: consequently 80 lbs. of wood, or hogshead, pays tobacco duty amounting to $2.66 40-100 cents.

"The tare allowed on rice, in tierces, entering the States of the Zoll Verein, is 13 per cent. It is to the interest of the producers of rice in the United States to be careful that there should be no excess of tare beyond this, inasmuch as they have a formidable competitor in Holland in the German markets. The Java rice is all imported in bags, upon which a tare of 4 per cent. is allowed in the Zoll Verein. This the Dutch, with their habitual good economy, avoid exceeding."

The difference to the planter may be determined when it is known that, during the year 1846, there was imported into the Zoll Verein 29,000 hhds. tobacco and stems. The extra duty would, therefore, amount to $77,731 75.

In many of the German States tobacco is successfully cultivated. With the view of exhibiting the peculiar features of the market for our extended trade in this article, we extract from the paper by the writer in the October No. for 1846, to which we have already alluded:

Statement of other colonial articles imported, re-exported, consumed, and on hand in the German Zoll-Verein in 1845, partly products of the United States and partly imported from U. S. Also the value of the consumed articles, their present average prices, rates of duty, and revenue derived from them.

Articles.	Imported.	Re-exported.	Consumed and on hand.				
			Quantity.	Av'ge prices at the ports of Hamburg and Bremen.	Value.	Duty pr. quintal.	Revenue derived from.
	Quintals.	Quintals.	Quintals.	Dollars.	Dollars	Dol's	Dollars.
Dye-stuffs	525,051	121,901	403,150	5 00	2,015,750	0 12	48,378
Potashes	146,399	8,864	137,535	7 00	962,745	0 17	23,481
Hides	333,177	18,673	314,504	17 50	5,503,820	free.	—
Ginger and other spices	10,857	277	10,580	11 20	118,496	4 50	48,360
Pepper and pimento	65,622	356	65,266	9 80	639,607	4 50	293,697
Cassia and cinnamon	12,414	262	12,152	35 00	425,320	4 50	54,684
Coffee	1,076,650	51,562	1,025,088	10 00	10,250,880	4 50	4,612,897
Cocoa	10,550	506	10,044	14 00	140,616	4 50	45,198
Tea	8,095	1,577	6,518	87 50	570,325	7 60	49,537
Refined sugar	63,243	—	63,243	8 40	531,240	6 40	404,755
Half-refi'd sugar (farin)	82,883	235	82,648	7 00	578,536	5 50	454,564
Raw sugar for refining	1,495,015	*78,040	1,416,975	5 50	7,793,362	3 45	4,888,563
Oils	218,921	13,768	205,153	10 50	2,154,107	1 15	235,925
Indigo	40,854	8,812	32,042	147 00	4,710,174	0 35	11,215
Palm, cocoa, spermaceti and mixed olive oils	114,977	1,295	113,682	9 80	1,114,084	0 35	39,789
Dried fish	43,197	1,976	41,781	3 50	146,230	0 35	16,723
Turpentine	22,303	836	21,467	9 25	198,570	0 23	5,938
Lead	102,097	7,391	94,703	5 00	473,615	0 17	16,099
Hops	23,624	17,758	5,866	14 00	82,123	1 72	10,090
Beeswax	8,875	250	8,625	33 00	284,625	0 35	3,090
			Total amount		37,853,862	—	11,962,375

"It seems now to be readily conceded that none but desirable or high grades of tobacco find a ready sale in the German markets. Ordinary qualities can scarcely be sold, even at ruinous prices. The color is a very important consideration with the buyer, and atones in a measure for defects as to taste and smell. Too much attention cannot be devoted by our planters to the handling and putting up of their crops, as the production of a better article than the inland German tobacco, is the only thing to increase the sale."

Since the fall of 1846, the articles of wheat, flour, corn meal, rye, and other bread-stuffs; also, provisions, namely: pork, beef, bacon, lard, hams, tallow, butter, cheese, dried fruits, &c., have been imported from the United States in considerable quantities.

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* Refined in the Zoll Verein and re-exported.

arative statement of the same articles imported and consumed in the Zoll- ein, in the five years from 1837 *to* 1841, *with the quantities consumed and hand in* 1845.

Articles chiefly imported from the United States.	Average per year of the five years, 1837, 1838, 1839, 1840, 1841.			Consumed and on hand in **1845.**	Increase in **1845.**
	Imported.	Re-exp'd	Consumed and on hand.		
	Quintals	Quintals.	Dollars.	Dollars.	Dollars.
otton	230,814	50,723	2,601,183	5,770,531	3,160,348
n twist and wadding manu- ured in Great Britian	382,629	29,745	9,174,984	14,731,878	5,756,894
co in leaves and stems	226,136	29,785	883,580	1,756,724	873,145
	120,634	178	644,439	1,305,346	660,907
e oil	259,92	14,746	1,544,628	2,754,810	1,210,182
ther colonial articles, partly imported from the United States.			$14,848,814	$26,519,289	$11,670,475
uffs	433,836	92,802	1,705,170	2,015,750	310,580
h	144,729	27 210	822,633	962,745	140,112
	176,147	23,465	2,671,935	5,503,820	2,831,885
r and other spices	13,915	807	146,810	118,496	*
r and pimento	26 935	200	262,003	639,607	377,604
n and cinnamon	5,343	226	170,095	425,320	255,225
	604,890	48,940	5,559,500	10,258,800	4,691,380
	8,359	45	116,356	140,616	24,260
	3,272	1,401	163,712	570,325	406,613
d sugar	14,404	—	120,994	531,240	410,246
efined sugar (farin)	290	140	1,050	578,536	577,486
ugar, for refining	1,151,569	32,824	6,152,768	7,793,362	1,640,594
	74,111	29,142	472,175	2,154,107	1,681,932
	28,366	4,583	3,496,101	4,710,174	1,214,073
sperm, cocoa, and mixed					
	58,334	11	571,565	1,114 084	542,519
fish	31,890	1,691	105,679	146,230	40,551
otine	16,242	258	147,632	198,570	50,918
	73,270	7,593	328,385	473,615	145,230
	14,941	12,979	27,468	82,124	54,656
ax	5 230	511	155,727	284,625	128,898
	Total amount		$38,046,592	$65,213,515	$27,195,237
	*Decrease in 1845, on ginger, &c.				28,314
	Total increase				$27,166,923

he official returns of the Zoll Verein States for 1842–3 and 4, we never seen. In the statement above, a comparative view is pre- ed of the articles named in the two previous ones, imported, re- rted, and consumed, in the five years from 1837 to 1841, together the amount consumed and on hand in 1845. The consumption ms shown to have increased in a very few years more than 70 cent.

n compliance with our intention, previously expressed, we propose ffer a few remarks upon the more important clauses of the German toms' Treaty, concluded on the 22d March, 1833. Its object will ound stated in the opening of our article, though not perhaps with clearness and precision by which it is marked in the document er consideration, viz: "A General Union, united by a common em of Customs and Commerce, embracing all the countries com- ed therein." Uniform laws were established under the fourth sec- for import and transit duties, with the exception of such modifi- ons as might result from the local interests or the particular legis- on of any of the contracting States, not in conflict with the com mon object. Thus, should a modification of the tariff be desired by a particular State, it would be necessary to establish, that the article proposed to be affected was of minor consequence in commerce, and the exception in no manner disadvantageous to the general interests of the Association. With a view to any alterations, additions or exceptions, to the common tariff, the unanimous consent of the contracting parties is required for its adoption. To this feature we might be disposed to offer our dissent, founded upon its *impracticability* in a country so diversified in interests and pursuits, were we not persuaded that the practical experience of years furnishes a suitable reply to the theories we may be inclined to advance. The articles excluded from the free commerce of the States are distributed under three heads, viz:

1. Articles monopolized by the States, such as playing cards and salt.

2. *Indigenous* articles, subject to different duties in the interior of the contracting States.

3. Articles that cannot be imported or imitated without prejudice to patent rights or conceded privileges.

As an exception, however, to the freedom of trade established under the VII section, it has been provided that the transport of articles of commerce between the States of Bavaria and Wirtemburg and the States of Prussia, of Electoral Hesse or of Ducal Hesse, (forming the parties to the treaty) shall not take place, except by "the public roads, military routes and navigable rivers." *Bureau's* of verification have in conformity therewith been instituted upon the frontiers, to which the conductors of merchandize are required to report themselves. To this, also, there are exceptions, consisting of the effects of travelers, articles of retail commerce in the raw material, the petty commerce of the frontier and of that transacted at the fairs, so long the favorit mart of the nation. Whether for the State or for private rights, th tolls, or tax in lieu thereof, are not to exceed the amount necessary fo the maintenance and repairs of the roads. To the portions of th treaty having a prospective bearing, we deem it unnecessary to offe any remarks, as, since its negotiation, many of them have been carrie into effect, and embodied in our article.

For the encouragement of industry, the contracting States wer bound by the adoption of uniform regulations, so that the citizens o one State should experience no obstructions to the privilege of seeking employment in every other State. If authorized to pursue th occupation of commerce in their own State, they would be subject t no impost in soliciting commissions in any of the other States. Th same applied to manufacturers and travelers who might have good with them. The seaports of Prussia are, by the XIX section, open f commerce to the subjects of all the contracting States at a commo rate of duty, and Consuls are required to assist with their influen and advice the subjects of other States. Simultaneously with th treaty a reciprocal cartel was concluded, to insure the "payment of th duty of consumption in the interior," and protect the common Custo House system from the effects of a contraband trade. Excluded fro the community of receipts are such articles of indigenous growth, th imposts upon which are collected in the interior of each State, th tolls on rivers to which the regulations of the Congress of Vienna or special Conventions apply, and fines or confiscations which, exclusive of the proportion paid to informers, remain the property of the Government imposing them. The produce of duties received in the common treasury are divided among the States composing the League, in the proportion of population, subject, however, to restitution for erroneous receipts. Should any State authorize a restitution of duties, not in conformity with the legislation of the customs, the amount is charged to the treasury of the Government granting it. At the expiration of every three years an enumeration of the population in the associated States is required to be made, and the result thereof communicated to the Assembly of Plenipotentiaries, who meet every year on the 1st June, to deliberate generally on the affairs of the Association. They are empowered to choose a President to preside, whose office, however, gives him "no pre-eminence over the other members." The first assembly was held at Munich. Without reference to the questions to be presented to their consideration, at the close of each annual meeting the place of assembly is determined upon. The subjects which will be presented for the consideration of the Assembly of Plenipotentiaries are thus classified. We present them to the reader in their original form:

"A. To consider the complaints which may have arisen, in any of the States of the Association, concerning the execution of the General treaty, of special conventions, of the law, and of custom house regulations; also of the tariff; when these shall not have been adjusted during the year by correspondence between the different Ministers.

"B. The definite reparation among the States of the union of the total common receipts, based upon the observations made by the superior authorities and verified by the central *bureau*, as may be rendered necessary by the common interest.

"C. To deliberate upon propositions and suggestions made by the governments for the perfection of the administration.

"D. Discussions upon alterations demanded by any of the contracting States, in the laws. tariff, and custom house regulations, as well as in the organization of the administration, and in general upon the development and perfection of the general system of customs and commerce."

Should extraordinary incidents occur during the period that the Plenipotentiaries are not in session, the diplomatic agents of the States are empowered to consult with a view to the measures necessary to be adopted, or to order an extra sitting of the Plenipotentiaries, should this in their judgment be demanded by the general interest.

We would consider our task but imperfectly performed, did we neglect to direct attention to the manifestations in the States of the Zoll Verein for the establishment of a Commercial University. This idea is peculiar to our age and markes the rapid strides of science in all the varied and useful departments of life. A higher appreciation of the world's destiny is evidently the leading characteristic of our times, over all other. To New Orleans, however, belongs the substantial merit of engrafting a Commercial Professorship, upon the proud seat of learning her noble liberality has erected.

Art. VI.—THE AMERICAN INDIANS.

Speculations have multiplied in relation to the origin of this remarkable people, from the very moment in which adventurous discovery introduced them to the nations of the civilised world. With these it is not our province now to deal; nor have we any dispositio to enter the arena with any of those gladiators who have contended in keen encounter over their rights and worngs, their virtues, thei vices, and their sufferings. Let all of this pass.

The late annual Report of the Commissioner of Indian Affairs, W Medill, Esq., furnishes an occasion for some reflections, and the dat which we think will be highly interesting and instructive to our readers. It accompanies the papers of the Secretary of War, for th year 1847.

The policy of the United States would appear to be in the highes degree favorable to the Indians, if a careful study of it were made b any unprejudiced individual. True, the position of these "childre of nature" is the most peculiar, and well calculated to excite th deepest sympathy. Yet is it the stern part of our country, thoug mitigated by benevolence, to fulfil an inexorable fate—to increas extend and multiply, whilst the Indian withers and fades away lik the blighted leaf of autumn. Thus in the progress of ages—me and nations perform their alloted parts, and yield the stage in tur

"The present hour has but one oracle for the Indians,—it is wo! wo! We introduce an eloquent passage from a paper prepared by our frien G. F. Holmes, Esq.: "The same evil destiny which haunted the Pelasgians is sucking the life-blood of the Indians: their whole caree too, so far as our certain information extends, has been one of progressive paralysis and extinction. The countenance of the red ma his manners, and his language, all seem to give a sad presentiment o his fate. The deep gloom which is impressed upon his noble but impassive features,—the quiet dignity of his address, manifesting th conscious pride of adversity, and the soft, subdued, but thrilling ton of his eloquence, combine to mark a race upon whom the Angel o Death has set his seal. Even his religion is breathed forth in th deep but haughty accents of despair: it is to Areskoni, the god o war and destruction, the evil spirit of his simple mythology, to who his orisons are principally directed. The brightest prospect for th Brave is death; the only termination for the race is an early and silent grave. Such, however, are merely the thick but pregnant fancies of the hour,—the reality is sterner still. Like the old Pelasgia race, the Indian stretched his dominion over a vast portion of a gre continent: like the Pelasgian, he has been exposed to all misfortune and has withered and waned away under every affliction which cou befal him. The European conqueror came among the myriads of th Indian tribes,—he made slaves of their thousands. All perishe The European settler occupied their lands; the stream, that was th dammed up, flooded its banks, and spread desolation where had be beauty and verdure before. The Puritan and the Cavalier, in th north and in the south, attacked them with the sword; the Quaker, i an intermediate region, by gifts and treaties, attempted the acco plishment of his objects,—but peace was scarcely less pernicious than war. They were thus driven from hunting-ground to hunting-ground, but there was no resting place for them. Wherever the march of the white man followed them, the wings of Destruction waved over their retreating steps, and rained down perdition upon them. If they escaped the sword, they must encounter the fearful ravages of the fire-water; if they abstained from intoxicating drinks,—a thing which it is hardly in the nature of an Indian to do,—famine met them in the path, and what famine had left unscathed, fell a prey to the small-pox or some other of the fell diseases which their white brethren had introduced among them. Turn where they will, the fiery sword is whirling around them, and all entrance into their expected or imagined Paradise is forbidden. For them, there is no land of promise,—no Canaan, flowing with rivers of milk and honey,—but black and bitter desolation awaits them. The pestilence is in their houses and about their tents, and there is none to stand between the living and the dead to stay the plague. Every step they take leads them nearer, and still more near, to the verge of the abyss: the clouds which gather around their path, become more dense and dark as they advance, and portend nothing but ultimate annihilation. At the present time, a few tribes have shot forth leaves and blossoms; but it is a hot-bed vegetation,—the colors, though beautiful, are not fixed, and the flower promises no fruit. They have been moulded by the superintendence of government officers—their principal chiefs have been of mixed breed, and their cultivation has been encouraged or supported by government annuities. A nursling which requires such tendance, will never shoot up in a strong and healthy tree,—the blossoms will wither upon the stem, and the only evidence of themselves which they will leave behind, will be the dead and faded leaves upon the ground. The other tribes are fast verging to destitution and utter extinction. The higher qualities of the Indian are rapidly disappearing under the operation of a hundred blighting influences. Every thing indicates coming annihilation. The numbers of their tribes are daily diminishing by want, riot, drunkenness and disease; the race seems to have lost its power of renovating itself; and each generation is likely to find its census but half that of its precursor. If their horoscope promises only degradation, death without progeny will forbid its perpetuity. The buffalo and other game of the Western prairies are vanishing; the sustenance and the occupation of the Indian are alike departing. But nature is still more fearfully and hopelessly arraying her powers against them: streams and lakes are drying up,[*] and the fish which, as a last resource, might have provided a scanty sustenance for an expiring generation,—this, too, small as it be, has their pitiless destiny snatched from their grasp. Verily, the fiction of Tantalus becomes true of a race. Regions of country, where, formerly, all was healthy, are now productive of epidemic diseases. May we not apply to the Indian what was said of the Jews?—"Now, learn a parable of the fig-tree: when his branch is yet tender, and putteth forth leaves, ye know that the summer is nigh: so likewise ye, when ye shall see all these things, know that it is near, even at the doors." Whatever the career and the fortunes of the Pelasgian may have been, the fate of the Indian is infinitely more wretched. To us, his destiny appears irrevocably sealed: he is incapable of civilization: he must wane away and be extinguished at last."

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[*] "For the last few years, the waters in all the prairies north-west of Traverse des Sioux, have been rapidly diminishing. Where, a few years since, were beautiful lakes, several miles in circumference, now not a drop of water can be found. Even streams dignified with the name of river, in which the Indian was accustomed to paddle his canoe, have entirely disappeared; and where the trader dreaded to pass, because it was difficult and sometimes dangerous or impracticable to transport his goods in dry carts, he now searches in vain for water to quench the thirst of himself and horse.

"The musk-rat ponds have of course dried up, and the musk-rats that were in them have perished, or gone nobody knows where."—Pub. Doc., pp. 421—2.

But we prefer to these sombre reflections some facts which the Reports present for inspection.

There have been important difficulties during the year, growing out of the affairs of the Stockbridge Indians, resident in Wisconsin. These people are divided among themselves in relation to the form of government they should assume. A large party, called the Citizens, adopt the privileges conferred by the act of Congress of 1843, giving them full and equal powers with the whites in all matters of law or elective franchises, and deny the power of the act of 1846 in repeal. An able protest is presented by them, which is met by another from the Indian party, maintaining the necessity of the repeal. We cannot forbear an extract from this latter paper:

> "Believe us, we are not thus tenacious of our national character and rights, from a mere romantic love of, and preference for, Indian habits and customs. True, we have some veneration for the memory of our fathers; and we have some pride in the recollection of those, our ancestors, who welcomed yours to American shores; who nursed them through the weakness of infancy to the strength of manhood; who fought for them the battles of that independence which alone gives you the power to dispose our fate and to speak our doom. But above all, we have the abiding faith that we must be a people by ourselves. Our God hath made us distinct from you—we must remain so or perish. We can never participate in the wealth, or the social privileges of the whites, however we might be made participants in their political privileges. Our limited possessions are not necessary to the glory or the prosperity of the United States; and to be valuable to us, they must be secured against the purchases of the whites. To encourage agriculture among our people, we allot to each male adult or head of a family, a tract equal to his capacity to cultivate, and the balance we hold in common as a reserve, to be alloted who shall come after us. If our lands were to be held by each individual in fee, with full power to sell at pleasure, and surrounded as we are by a white population, eager and apt for acquisition, the generation which shall succeed us would find themselves without a home."

The next paper is furnished by Wm. Richmond, Acting Superintendant at Detroit. He tells us of the slow advances of the Ottowa, Griswold and Black river colonies, and the operations of the Missionaries among them. The Chippewas and Pottawatomies appear to be more promising.*

[TO BE CONCLUDED.]

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*We had prepared rather an extended paper upon this subject, but the unexpected length of other articles forces us to divide it. It is always with regret that we treat a subject in this manner, as much of its interest is thereby lost But necessity has no law, and our contributors, we hope, will have as much philosophy as ourselves when the thing occurs.

AGRICULTURE AND MANUFACTURES SOUTH AND WEST.

I.—EAST INDIA RICE.*—(*Concluded.*)

WEEDING, loosening the soil, thinning where too thick, and transplanting to where the crop is too thin, is performed thrice. First, between the forty-fifth and fiftieth day, and again in twenty and thirty-five days from the first weeding. Rice which ripens in five and a half months must be inundated on the twentieth day; and the weedings must be on the same day, and twice again at intervals of ten days.

The plowing season for the *Cumba Caru* when dry seed is used, commences about the 21st August, and the seed is sown about the middle of December.

In the *Maysha Caru*, when dry seed is sown, the plowing begins in the last week of March, and the seed is sown after the first week of April. Dry seed is never used for the *Tula Caru*. In some places of Dinajpoor the seed is dibbled; a few seeds being dropped into holes, made about a span apart. This is the mode usually adopted for inserting the *Gohya*, or upland rice, by the Nepaulese.

Mr. Campbell states, "that there is probably one-third of the valley lands annually under the cultivation of this variety of rice. It is sown during the latter half of April, and the early part of May, and reaped during the last week of August and the whole of September. In the cultivation of Gohya, the greatest possible attention is paid to the preparation of the soil, by reducing it to a great degree of fineness, as well as by the exhibition of manure, and by previous exposure of the land to the fertilising influences of water, air, and frost. Whether the Gohya succeeds a *vetch* crop, a crop of *touli*, or another Gohya crop, the land to be sown with it in spring is delved, pulverised, and watered (if practicable) during the winter months of December and January. In addition to this, it has, when suitable to the soil, a coating of the black, earthy manure, laid on during the winter, and when the cultivator can procure it, one of artificial manure immediately previous to the sowing. Early in April the manure previously collected in small heaps on the field is spread over it, and about the middle of the month a light delving is given; which, followed by careful pulverisation, serves to mix the manure with the soil, to keep the former close to the surface, and to render the field a dead level. Immediately the land is thus prepared (not some days after, but simultaneously with the preparation,) the seed unmoistened is put in the ground by the fingers, and in rows six or eight inches apart, the sowers covering up the seed as they advance by drawing the hand over each transverse row of seed put in the ground. The Gohya sower squats on his or her hams, with a small basket of the seed placed on the ground between the knees, and using the forefinger and thumb of both hands, deposite the seed, grain by grain, or two grains together, at regular distances in the ground, commencing latterally at the utmost reach of the hands, and moving backwards after each row of six seeds is completed, and the hands have been quickly drawn along the row for the purpose of covering them in. Nothing can be more advantageous for quick and equal vegetation than this process; the seed getting a bed in moist, freshly turned up, and finely powdered soil, not one grain of it being left uncovered, nor one grain deeper set in the soil than its neighbors.

The after culture of Gohya is as carefully and laboriously gone through as its sowing. So soon as it is well above ground, the soil is loosened at the roots of each row, by means of the small one hand hoe, and any weeds which may have sprung up with it are carefully removed. This hand-hoeing and weeding is usually repeated three or four times, and occasionally five or six times during the growth of the crop. So universal is this efficient and careful cultivation throughout the valley, and so essential is it considered for the procuring of a full crop, that the cultivator who leaves his Gohya unhoed and unweeded is looked upon as a ruined sluggard; often repeated weeding and hoeing is considered as indispensable to this crop as flooding to the malsi and toulis.

"The more you weed and hoe the Gohya," say the cultivators, "the heavier will be the returns of Dhan, and the greater the produce of chaul, or edible rice, from it." Not only the straw and ear are increased in size by it, but the more

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* For other information on Rice see Commercial Review, vol. I, p. 230; vol. III, p. 416; vol. IV, p. 502; vol. V, p. 181.

[illegible] and weed. the thinner is the husk of the grain compared with its nutri[illegible]. With the exception of the indigo cultivation in Tirhoot, and that of [illegible] in Behar generally, I have never seen the culture of the Gohya rice [illegible] surpassed in efficiency, and I believe it is but rarely equalled in any part of India; yet the crop is inferior to the transplanted rice, which neither wants nor receives a tithe of this care, and is rarely weeded in very wet seasons. The reaping, thrashing, and drying of the Gohya are performed as on the transplanted rice. Hukwa is made from it also, but in small quantities. It is of a whitish yellow color in the ear, the touri is of a brighter yellow, and the [illegible] brown or blackish. The Gohya is considered very nutritious and wholesome.*

In Nepaul, from thirty seers to one maund are sown per biggah, and the average produce is fifty maunds.†

Fifteen cutcha seer of rice is the quantity of seed sown in the northern parts of Bengal upon a cutcha biggah (1-8 of an acre) of land.‡

Germinated Seed Sowing.—In Mysore, if this mode is adopted for the *Hainu* crop, the plowings occur between the third week of June and the same period in July. The plowing is repeated four times, each at right angles to the preceding, and the fields during the time inundated. The field is then manured, immediately plowed a fifth time, and the mud smoothened with the laborer's feet. The water is drawn off, so as to leave its depth not more than an inch, and the sprouted seed sown. It requires no process to cover it. During the first twenty-four days the field is watered every alternate day, and then inundated until the crop is ripe. The weedings are on the twenty-fifth, thirty-fifth, and fiftieth days.

The seed is prepared by being kept under water in a vessel for three days; it is then mixed with an equal quantity of decayed cow-dung,§ and laid in a heap in the house entirely sheltered from the wind and covered with straw and mats. At Joomla, in Nepaul, the covering used is a mixture of earth and manure. At the end of three days sprouts three inches long are thrown out, and it is then fit for sowing,

This mode of cultivation is more troublesome than the former, and the produce is not greater, but it allows a crop of pulse to be previously obtained from the same ground, and requires only three-fourths the quantity of seed.

Transplanted Rice is cultivated in two modes, viz., *Barra'agy* or *dry plants*, and *N-r'agy* or *wet plants*.‖ Low lands are required for each. For the *Barra'agy* in the *Hainu* crop, the ground is worked at the time and in the manner as for the dry seed crop. In the last week of May the manure is put on, the seed sown very thick, and covered with the plow; one-tenth of a biggah of seed is allowed in Puraniya for every biggah that is to be planted. No rain occurring before the eighth day, water is given, and again in a fortnight; but if there are showers these are unnecessary. From the forty-fifth to the sixtieth day the plants continue fit for removal, to facilitate which, the field is inundated for five days before. For their reception, the field, inundated all the time, is plowed four times in eight weeks, commencing in the first week of June. Manure is added before the fourth plowing; after this, the surface is levelled with the foot, the seedlings are planted, from three to five being placed together, and an interval of a span allowed between every two little tufts. The water is let off for a day, but the land is subsequently kept flooded. The weedings are performed on the twentieth, thirty-fifth, and forty-fifth days after the transplantation.

In Mysore, for the *Tula Caru*, sprouted seed is sown about the 19th of October, the plowing having commenced a month before. The *Cumba Caru* sprouted seed is sown about the 1st of January; the plowing having taken place in the previous month. The plowing for the *Maysha Caru* sprouted seed commences in the second week of April, and the sowing in the same period of May.

When sprouted seed is sown in Mysore, one bushel and four and a half gallons are allowed to an acre, and an average produce is rather better than thirty-one bushels.

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* Trans. Agri Hort. Soc. vol. iv. pp. 122, 124.

† Ibid. vol. iv. p. 79.

‡ [illegible] Ind. Rec. vol. ii. p. 185.

§ [illegible] they also add fresh plants of *Phlomis esculenta* (Roxb.) there [illegible]

‖ [illegible] system is called *Nadnga* in South Malabar.

About Medura, the quantity of seed sown is larger, varying from three pecks to more than one bushel, and the advantage is shown by the increased produce. This was from fifty-nine to forty-seven bushels, being invariably the largest where most seed was sown.*

TRANSPLANTING.—When this mode of cultivation is adopted, the rice is sown very thick in a small space of manured ground; and when the plants have attained the height of six or eight inches, it is ready for transplantation.

A field overflooded has to be plowed until the surface is converted into a sufficient mud, and to this the plants are removed from the seed-bed. One or two are dropped together in a place, and this is repeated at equal distances all over the field, which appears a mere sheet of water. To secure the plants sinking in their proper position to the bottom, each has its roots enveloped in a ball of clay. Such rops, says Dr. Tennant, though tedious in preparation, generally remunerate for he extra trouble.†

The progress of vegetation in Behar is so rapid, that the first harvest arrives in wo months after planting the rice as above described; the second is reaped in November, and having been planted in August, may be grown on the same field s its predecessor. The second crop grown is a fine species of rice, and constitutes the most valuable crop, and upon its success the well-being of the farmer nd of the country greatly depend.

In Mysore, for the transplanted *Hainu* crop the ground is ploughed dry thrice etween the middle of February and the middle of March. About the 24th of May the field is inundated, and plowed four times in the fifteen following days. After the last plowing, the surface is levelled with the foot, the seed sown very thick, and dung sprinkled over it. The water is let off; but on the third, sixth, and ninth days water is again given, and as often let off, not being allowed to tagnate. On the twelfth day the water is let on, and allowed to remain until he plants are fit for removing, which is about thirty days after sowing. The cultivation of the field into which they are transplanted is the same as for the *Barra'agy*.

By these modes the field into which the seedlings are transplanted are enabled o produce previously a crop of pulse. Otherwise, the produce is not more than hat obtained from seed sown where the plants are to remain. Nor is it stated by Dr. Buchanan that it is superior to the less troublesome mode of germinating the seed. It has the advantage of ensuring a more regular plant, but its regulated distances are of less consequence, since hoeing is not required in a field constanty under water. Twenty times the seed sown is an average crop.

In Mysore the *Cumba Caru* transplanted rice is cultivated only as wet seedlings, *nir'agy*. About the 16th of November the plowings commence, and the seed is sown by the last day of December. The fields on which this crop is ripened are begun to be plowed about the 1st of December, and the transplanting commences about the 29th of January. The *Tula Caru* transplanted rice is sown *nir'agy* in the third week of October, and is transplanted within a month after. The *Maysha Caru* transplanted rice is also sown *nir'agy*, after the first week of May, and in about a month the seedlings are transplanted.

The regular *Caru* crop of the transplanted cultivation does not interfere with a preceding crop of pulse; but this is last when, from want of laborers, &c., the early or late seasons are adopted. The various modes of cultivating rice give the farmer the great advantage of being able to cultivate the same land with fewer hands and less cattle than if there were only one seed time and one harvest, the labor being divided over a great part of the year.‡

In the vicinity of Pali-ghat, in South Malabar, the land appropriate for the production of rice is called *Dhanmurry*, and is of two kinds—the *Pelealil*, or high ground, which yields only one crop annually, and the low ground, *Ubayum*, which produces two crops in the year.

The chief points of difference in their system of cultivation, is, that on the Palealil ground they keep the crop without water for fifteen days after being sown; it is then hand-weeded by women, and the plants thinned to equal distances. At Pali-ghat, when rice is cultivated according to the transplanting system, the seedlings are raised in a poor, high-lying soil, called the *Maytan*, which is kept for the purpose, and pays no rent.

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* Buchanan's Mysore, i. 140.

† Ind. Rec. ii. 126.

‡ Buchanan's Mysore, i. 84–90.

I shall make but little allusion to the agriculture of Birmah, because it is very inferior even to that of India; but, as an example, I will give an outline of that adopted for this their principal crop. After ploughing, which is not done more than twice, and even in some lands only harrowing is given, the clods are broken by means of a cylinder of wood, dragged over the surface, but not turning upon an axis. The land is wetted, and the plants transplanted, after which no cultivation is given. Two crops, and sometimes three, are obtained annually. The best is produced during the rains, the others by irrigation, which is a rude, expensive process, performed by hand.*

Transplanted spring rice ts cultivated in Puraniya on the banks of the marshes, which gradually dry as the spring advances, but which always retain water in the center sufficient to supply the fields.

Between mid-September and mid-November, a plot is plowed upon the edge for a seed-bed. In this, the soil being first mixed into a mud, the seed is sown, having been made to sprout by steeping it for thirty hours in water, and keeping it covered with grass in a sheltered place.

The seedlings, before the second week of January, are transplanted twice, lower down the marsh's side each time, as the water retires. At each transplanting, they occupy double the space they previously required.

Between mid-January and mid-April they are finally transplanted. About one-half is so removed in the first month of the season, and is very productive; an eighth is transplanted in the second month, and gives an indifferent crop; and the remaining three eighths are transplanted during the third month, making a return so miserable, as to be scarcely worth attention, if it did not occupy time which wonld otherwise be passed in idleness.†

Reaping.—It is a common practice in Dinajpoor, when the rice is nearly ripe, to press the crop quite flat on the ground, by passing a bamboo, held by two men, over the whole. Various reasons, says Dr. Buchanan, are assigned for this. It is said, especially in the northwestern parts of the district, where the practice is most common, that in some measure it secures the field from the depredation of thieves, who, according to the most moderate computation, compose three-eighths of the men in these parts. It is also said, that it prevents the grain shaking out when ripe, and so gives time for harvesting it—resting on the ground not being injurious; moreover, that it facilitates reaping, as the reaper sits on his heels while at work. It is chiefly the second and third kinds of winter rice that are managed in this manner. In reaping the course kinds, little but the ears are cut off; but of the finer, the straw is severed close to the ground.

Diseases, &c.—Although the rice requires a more abundant supply of water than any other of the cereal crops, yet that it can be applied in excess admits of no doubt. If, during its early growth, the water for several days is deep enough to overtop its central leaves, the crop is injured, and may be destroyed. Dr. Tytler states decisively, that in Bengal the rice annually grows in water far more plentiful than is required for its proper cultivation, and hence the greatest part of every crop of Bengal paddy, more particularly the autumnal, or *ashoo* (vulgarly pronounced *aoosha*) harvest, is affected with the *ergot*, or *cockspur*, a disease which renders it not only innutricious, but poisonous.‡

The *ergot*, *clavus*, or *cockspur*, which occasionally so much injures the rice crop, is known in Europe as affecting barley, rye, and, more rarely, wheat. It has been shown by M. de Candolle to arise from a parasitic fungus, which he has named *Sclerotium clavus*.

It is an elongated substance, filling the place of the grain in the glume, or husk; its flesh firm, white, compact, of one substance; its surface dingy purple. Like all the parasitic fungi, its occurrence is promoted by such excessive humidity as is unfavorable to the plant. Some districts are much more liable to its attacks than others. It has not been found to be caused by applying water in excess upon the head of the grain. It is strictly topical—one or more grains in the same ear may be affected, and the others free.§

In Nepaul, the upland rice is liable to suffer from the attacks of grubs. These attack the roots of the plants, and their ravages are rendered apparent by the languishing and whitening of the young rice plants, when only a few inches ove the ground; this is attributed to the attacks of a large grub, called *kiongki*, root-worm, of a black or blue color, generally the thickness of the forefinger, metimes as thick as the thumb, and about two inches long. It is supposed by e natives to be produced, and to thrive best, in rotten manure, and to devour e seed and young radicals of the plant. The *kiongki* is most destructive to the ohya, or upland rice, attacking it soon after being sown, and continuing its vages until about the middle of May, after which it ceases. The people do t know what flying insect this grub is the larva, nor have they any remedy gainst its attacks, except removing it from the fields when they see it. The ird disease of white crops is a premature whitening of the ears of rice (both inds), and the failure of the grain in them. This is attributed by the Newars the attacks of a small grub, the size of the common white maggot, the body of hich is white, the head black and hard. It is called *sheo-ki*, the marrow or pith-orm. The *sheo-ki* is supposed to eat the roots of the rice plants; but its prey ore especially is said to be the stalk and juices of the plant; for obtaining the ater of which, it cuts the plants at the joints, after which the ear whitens without lling. The natives attribute the drying up of the ear and plant to the drinking of ts milk (sap) by the grub, which prevents the due formation of a full-sized grain.*

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* Crawford's Embassy to Ava, &c. † Martin's Buchanan's India, iii. 212

‡ Trans. Agri-Hort. Soc. of India, i. 10. § Quart. Journ. of Science, ii. 272

PANICUM ITALICUM.—There are two varieties cultivated in Mysore, the *ghidu*, r dwarf, and the *jotu*, or *doda*, or tall.

Soil—In whatever country grown, it requires the best light, dry soils, unless anure can be afforded for its culture; in which case a poorer soil will suffice.

Cultivation.—The ground is ploughed six times in spring; and the seed about alf a bushel per acre, ploughed in at the commencement of the rains.

It is sometimes grown in drills among *Cynosurus corocanus.*

No after culture is given. The crop, ripe within three months from the time f sowing, is reaped close to the ground—in Mysore stacked for eight days; and fter being dried in the sunshine for one day, the grain is trodden out. The sual produce is sixteen bushels per acre.

Use.—It is used for the same purposes as rice. The straw is not good fodder.

PANICUM MILIARE.—There are three varieties in Mysore, called *hari*, *cari*, and *al*, or *bily*. They are never intermixed.

Soil.—It requires a light soil. Of this description, the very poorest is usually ssigned for its growth—for no other reason than that manure is so deficient.

Cultivation.—The land is ploughed in the spring five times; and, when the eavy rains begin, the seed is sown from two to three and a half gallons per acre, nd ploughed in. Manure is not absolutely required for this crop, even in the orst lands, though its application improves the produce.

No after culture is given to it; and in three months it is reaped, being cut close o the ground, and gathered into heaps. In five or six days it is ready for the hrashing-floor and its oxen. An average crop is in some districts three, and in thers sixteen bushels per acre; but always most abundant where the crop is own thickest.

Use.—The grain is employed for the same purposes as rice, and the straw is a erviceable fodder.

PANICUM MILIACEUM.—This is the well-known *chenna* of Bengal. Two varieties are known in Puraniyah,—*bhadai*, which ripens in spring, and *vasaki*, ripening in the rainy season,

Sowing.—The first is sown about February, and the second just as the rains ommence.

In Mysore only one crop of this grain is sown, and the sowing takes place at he close of the heavy rains.

Soil.—This differs from the other species in preferring a tenacious soil, which hould be moderately fertile.

Cultivation.—After two or three ploughings, the seed is sown, and, in Mysore, overed by an additional ploughing; but in other parts of India the usual harrowng is given. No manure is applied, nor any other culture. The crop ripens in bout ten weeks, is reaped close to the surface, and the grain is trodden out. In ysore it is stacked for a few days before thrashing.

Use.—The seed is used as rice, but the straw only serves for fuel.

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* Trans. Agri-Hort. Soc. iv. 152—3

II.—THE VINE IN LOUISIANA.*

ALEXANDRIA, January 26, 1848.

J. D. B. De Bow, Esq.

As your inestimable periodical, the Commercial Review, solicits information upon any subject connected with, or applicable to, Horticulture, as well as Agriculture, I proceed to say something in relation to the Vine. The *Scuppernong* will be more particularly alluded to than any other—for the reason that it is a native of the land, the mistress of the forest; and while it embraces all the requisites necessary for making wine, its longevity, incalculable product, and hardihood are proverbial—I should say when properly managed—for if years of experience in this as well as many other kinds, both native and foreign, have taught me any knowledge, I must add that the *Scuppernong* or *Roanoke* vine is, and has always been, miserably managed. Of all the essays written upon this particular vine, from the time of the Hon. John Lowell to this day, not an effort has been made to bring it to that high state of cultivation it so justly deserves, and has been uniformly left to trail upon an arbor, yielding what the bounties of nature could afford it. The son planting and training it just as his father did, and because his father did. But, sir, I conceive that this routine of doing wrong in defence of our parents must end, if we expect to be ever benefitted by experience. For in turning a deaf ear to horticultural experience, where, let me ask, would have been the fine pippins and pears that our market can boast? One would have been yet in the bosom of the "austere crab," while the other would linger in the miserable stoned pear or pyraster; and after all the experimental advantages before us, I still hear the old plan of arbor training for the Scuppernong. But to this subject presently.

My attention is drawn to the culture of the vine, and facts relating to it, for I see at no distant day that the culture of this *very* vine is to assume an attitude of progress heretofore unparalleled in the history of our country; nor can I think otherwise, when I behold the prouder staples of our soil brought down to the lowest state of degradation in value, by the combination of the capitalist, the spinner and the weaver. Sir, why not. We have certainly a vine, or vines, well calculated for such an end, acknowledged by both native and foreign judges to be amply sufficient, and the only thing necessary is a glance at its culture for the benefit of the cultivator that he may begin right, and lose no time, for it often happens with vines as with every thing else, that when we find ourselves erring the past ten years we are apt to be disgusted, disappointed, and abandon the culture.

Many years ago where I now reside, my attention was drawn to the culture of the vine, and after having imported many different varieties of native and exotic vines from the Eastern States, and from Europe, I naturally looked forward to the best mode of training and other management of the vine. I adopted as a plan the same used in the Thomery gardens of France, as the proper mode for my little vineyard, with this difference, however; instead of giving five vines to eight feet square, I gave but a single one, (natives,) for I foresaw that the great development necessary to all of our native vines required a corresponding space for their extension; and, consequently, I gave a single vine of the Catawba, Isabella, Norton's Virginia Seedling, the Cunningham, and other varieties, (all native) the space of ten feet; I train and prune them on the same plan as at Thomery, except allowing six or seven times the bearing wood, as is allowed to the Chasselus. The Scuppernong, I found upon farther familiarity, required at least three times the above space. Keeping the plan in view and enlarging upon it I hit exactly the one for this vine, and perhaps here will be the proper place to give my mode of management, and as the management of a single vine requires common understanding only to be applied to a whole vineyard, I will speak only of one.

Take five posts of any durable wood, set them two feet in the ground, and six feet out of the ground. To the center post plant your vine (Scuppernong.) All that is necessary the first year is to encourage the growth by keeping it clear of grass, taking care to train it perpendicularly for the sake of its greatest growth. When the leaf *first falls off* in November, it requires the first process of manage-ent. To the five posts already planted, you should at least have four slats or ils, one two feet from the bottom, one at top, and two in the space between; the ne should now be cut down to six inches below the lowest rail. When the routing season comes on, it will throw out a number of shoots on all sides of e vine; two top ones only should be allowed to grow, and one of these should trained obliquely to the right, and the other obliquely to the left; if your vine attended to during the growing season you will have some ten or twelve feet vine to operate upon. And here comes the second year's management, and that to lay the vine gently upon the bottom trellace, binding it loosely at every fifteen eighteen inches to the extent of the well matured wood of last year. About ghteen inches of the extreme end should be inclined uppermost to encourage e length, so as to fill out the whole extent to the right and left to the full dis- nce of sixteen feet, eight each way from the center. Now, from the center ost each way you should have small sticks tied, or otherwise fastened, one foot part, from the lowest trellace to the top one. To each of those sticks train the earest vine that starts from the arms, destroying all others. Thus you will have, n the first eight feet to the right and left eight uprights, making sixteen pright vines to the top trellace, the extreme end of the old vine will have produ- ed in growth in this time sufficient to fill up the other eight feet each way, and hould be turned down and subjected to the same management as the first eight ere; and when the vine is complete you will have thirty-two feet of arm with hirty-two uprights, and these uprights should be annually so pruned that they ive six inches of new wood each, six inches apart, cutting off at each succeeding runing and substituting young wood to produce your fruit. After the training s completed, the pruning becomes so uniform year after year, that any intelli- ent boy can perform the task.

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* For other information on Vines and Wine, see Commercial Review, Vol. III 465, 464, IV. 310, 313, 315 V. 29.

I have a Scuppernong vine about five years old; half of this vine is allowed o run on an arbor, while the rest is trained and pruned somewhat as described bove, and the result last season, *of the contrast*, was truly surprising—more rapes being upon a foot square on the pruned side than was to be found on a quare yard on the other side. This was witnessed by many of my neighbors ho viewed it with astonishment.

I paid a visit in 1828 to my old native State, North Carolina, on business, and uring my sojourn something took me to that part of the State where the Scup- ernong vine is propagated to a large extent; all, however, on the arbor plan, or ome such, and although in the midst of the vintage many of their vines had on hem not a single grape, while, perhaps, another close at hand would be tolerably ull. Upon enquiry, I found they bore their fruit alternately; if one overbore ne season it would be too much exhausted to produce fruit and support the addi- ional foliage and old vine the succeeding year. When I asked why they trained heir vines upon so unmanageable a plan, they invariably replied, "When I get hem this way I have no further trouble with them," never dreaming once of the reat utility of the pruning instrument. Ask any one conversant on the subject f the vine and its culture, and he will tell you that the benign influence of the un's rays is absolutely indispensable to the proper maturation of the fruit so ssentially required in the fermentation. Now, I contend that, under this thatched oof canopy is totally defeated this most desirable object, for under this manage- nent the sun's rays are entirely obstructed from the earth, and it is evident from his cause that the Scuppernong does not produce better with many persons than t does. I noticed a very flourishing vine, in 1841, at Major A. Alston's, in Warren county, N. C., who proposed grubbing it from its position for producing o better. Some, under the same management, not far from this, are doing no etter. I could mention several, but one I will allude to particularly, in the Bayou Chicot neighborhood, belonging to a gentleman whose lady kindly fur- ished me with roots; and while this vine produces comparatively nothing under he arbor management, I have told you what its offspring has done by pruning and training.

In recommending a suit of grapes for vineyard culture, I should unquestion- ably place at the head of the list the Scuppernong. This will give White wine, and for coloring purposes, of the kinds that do not rot, with me would be first Norton's Seedling, Weller's Hallifax, Cunningham, Willis' Fredonia. The last four ripen in regular succession, while the first is in product for six weeks in this vicinity. The above five kinds out of many varieties in my vineyard are all that is required for vineyard culture, and I might add for the table also, for nothing can excel the Scuppernong for delicacy.*

I should have added that the distance between trellaces should not be much more nor less than ten feet from row to row, or from one row of trellace to the other.

The great stumbling block to many whom I have found desirous to enter on a small scale into this business, appears to be the doubt how they are to procure vines as it does not come from the cutting. When this is once understood, rooted plants are as easily procured as from vines that come from the cuts. Procure one, two, or three Scuppernong rooted vines, plant them in a rich light earth, train them to a stick three or four feet high and not higher. When arrived at that height it will naturally drop all its laterals and foliage in the ground in the month of July; when the shoots from the main stem have covered a space of the diameter of five feet, cover all the young vines with dirt to the depth of four inches, leaving the ends of the vine out two or three feet long. In the winter this will afford you from 10 to 100 rooted vines for immediate use. I have one vine of this description that is quite sufficient for any one vineyard. Those two items I consider of importance.

III.—TOBACCO.

We have furnished in the past numbers of our Review, almost everything that relates to the history of, and trade in, this remarkable plant, particularly in vol. II, p. 42, 43, 47, 149, 256, 249, 355; vol. III, p. 575, 578; vol. IV, p. 391, 448. We add the following, which is of interest, from the last number of Skinner's Farmers' Library.

The genus *Nicotiana* is an annual plant, flowering and ripening its seed in almost all parts of the U. S. and is yet cultivated for profit as far north as Connecticut, where its leaf is remarkably delicate and silky, with small fibres, and when cured rather of a dark cinnamon than of a bright color, and is understood to be used chiefly as wrappers of cigars.

As to the character and habits of the worm and the fly, we have been for these to the foot of Gamaliel; and were there so fortunate as to obtain the following account from that distinguished planter, the *President of the Prince George's Agricultural Society*, and what is more and much better proof of practical excellence, the *winner, the past year, of the first prize for the best managed farm!* —a much greater honor, in our poor esteem, than if awarded for killing 1,000 guerrillas.

Volumes have been written, pro and con, on the use and abuses of this very remarkable plant—remarkable alike in its history, its uses and its commercial relations—and especially in its serpent-like power to fascinate and overcome by its *charms*, of an indefinable sort, the disgust it is in most respects so well fitted to inspire. As we have anticipated by a month or more the season for sowing the seed, we may indulge here in some remarks relating to its original habitation and its chemical and medicinal properties, intending in subsequent numbers, and in good season, to present it in all the practical views connected with its cultivation and commercial value—not for the benefit of our friends in the old "Plantation States," who know it all "like a book," but because it may interest some who propose to embark in its culture, and yet more for the reason that in the Farmers' Library it is proper that the American cultivator should find, ready at his hands, memoirs, as full as need be, in regard to every important branch of Rural Industry.

De gustibus non disputandum—in plain English, there is no disputing about tastes; and though many of our readers may forego, and even abhor the use of tobacco in every form, the consumption of this delectable weed has nevertheless spread into all parts of the world; nor is there any, where the taste for it is so licentiously indulged as in our own, if we may believe the half that is written to stigmatize our habits, on this point, by travelers, male and female, who come

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* We regret that it is not in our power to furnish in the Review the diagram with which the writer favors us.—[Ed.

Trolloping over our country, to seek what blemishes they may descry—and, alas! let us confess aside, descrying but too many. To quote our own language twenty-seven years ago—

"In the whole Vegetable Kingdom, perhaps, no plant can be found, the propagation and effects of which have attracted as much notice, and produced so much excitement as this disgusting—some would say, fascinating weed. It has been alike the theme of poetical eulogy and the object of secular and political proscription. Popes have let loose their roaring bulls, and Kings have issued their decrees against it, and well would it be if Church and State would form alliance only on *such occasions.*

"Like some other narcotic poisons, however, tobacco has made its way against the denunciations of all its enemies, and becomes more dear and indispensable to those who use it in the ratio of its injury to their constitutions.

"Tobacco is a native of this country, and was first imported into Europe about the middle of the sixteenth century by Hernandez de Toledo, who sent it into Spain and Portugal. The Embassador of Francis II, at the court of Lisbon, carried it into France in 1560, when it was presented to Catharine de Medicis, as a plant of extraordinary virtues from the New World. The Embassador's name was Nicot, hence the botanical appellation *Nicotiana* applied to this genus of plants. The introduction of the custom of smoking it in England has been ascribed to Sir Walter Raleigh.

"We are told that some tribes of the aboriginal inhabitants of this continent used tobacco as a burnt offering, the smoke of which they supposed to be acceptable to the gods. Thus we find that different nations address themselves to different senses as the medium for obtaining divine conciliation. While the pious Christian seeks propitiation by vocal or instrumental music, or a concert of both, the poor untutored savage implores favor and happiness through the incense of aromatic gums and the odor of sweet-scented tobacco.

"It is remarkable, says a learned author, that in the days of its first general introduction into Europe no man spoke about it with coolness or indifference, but every one warmly espoused its censure or its praise. Camden, in his Life of Queen Elizabeth, says that 'men used tobacco everywhere, some for wantonness and some for health's sake, and that with insatiable desire and greediness, they sucked the stinking smoke thereof through an earthen pipe, which they presently blew out again at their nostrils—so that Englishmen's bodies were so delighted with this plant that they seemed as it were degenerated into barbarians.'"

At that rate, what a number of *in*side barbarians we must have here in New York, where, according to the great statistical writer McGregor, ten thousand dollars' worth of cigars are smoked every day! to say nothing of the quantity that goes into the mouth and nose!

Dr. Venner, in a work entitled *Via Recta ad Vitam Longam*, published in London in 1638, gives a brief summary of the injuries done by tobacco: "It drieth the brain, dimmeth the sight, vitiateth the smell, hurteth the stomach, destroyeth the concoction, disturbeth the humors and spirits, corrupteth the breath, induceth a trembling of the limbs, exsicateth the windpipe, lungs and liver, annoyeth the milt, scorcheth the heart, and causeth the blood to be adusted. In a word, it overthroweth the spirits, perverteth the understanding and confoundeth the senses, with sudden astonishment and stupiditie of the whole body."

Thus, more than 200 years ago, was denounced the great staple which our Prince George's friends persist in cultivating. If half the learned Doctor says of it were true, one might suppose that Malthus himself could desire no more effectual check on the readiness of mankind to follow that one most heeded of all God's commandments. But, like old Count Cornaro's *Via Recta ad Vitam Longam*, we apprehend it will ever be found much easier *to read than follow it*.

The priests of some tribes swallowed the smoke of tobacco to excite in them a spirit of divination, and when recovered from the fit of stupor into which it threw them, they asserted they had held a conference with the devil, and from him had learned to predict events. Their "Medicine Men" pretended to be inspired in a like manner with a knowledge of diseases and their cure. The rich indulged in it, we are told, as a luxury of the highest order, and the poor, as now, gave themselves up to it as a solace for the miseries of life. In the Southern States, now, in their almost universal solicitude for the comfort of their slaves, planters provide for them a regular supply of tobacco.

So excessive became the use of it that in many countries its consumption was forbidden or restrained by public authority. So excited against it was the First James, of England, that he not only denounced it in his book, "The Tobacco Blast," but expressly prohibited the planters of Virginia from cultivating more than 100 pounds on any one plantation, and vehemently warned his subjects not to "sin against God and harm their own persons and goods, and render themselves scorned and contemned by strangers who should come among them, by persevering in a custom loathsome to the eye, hateful to the nose, and baneful to the brain." Of such sumptuary laws and arbitrary interference with private habits and individual economy and freedom of action, have we not even yet some unavailing if not barbarous relics on our statute books? In this, be it understood, we by no means refer to the municipal law, still in force in a neighboring city, against any man caught, *flagrante delicto*, *smoking in the street*—extending their magisterial benedictions against this pride of Maryland industry even farther than Pope Urban the VIIIth, who confined his excommunication to those only who should impiously diffuse the smoke of tobacco *in the churches!* In Constantinople the anti-tobacco laws were yet more severe, for there the Turk who was found smoking was paraded publicly, with the pipe *transfixed through his nose*—a more appropriate punishment, one would think, for such as belong to the numerous and fashionable tribe of *snuffers*.

In the earliest record of Harvard University, as is set forth in the Memoir before us, there is a regulation that "No scholar shall take tobacco unless permitted by the President, with the consent of their parents and guardians, and on good reason first given by a physician, and then in a sober and private manner." We can't undertake to say how it is at Harvard University now, under the Presidency of a gentleman so distinguished for scholarship and courtly manners, but we apprehend, for that matter, that in many of our institutions, the justification of the student might be found in the example both of the L. L. D.'s and the M. D.'s among their elders.

On the other hand, this exciting weed has not failed in advocates among the literati, some of whom have hymned its praises in various forms and languages; for as Mr. Jefferson extolled the *oil of olives* as "the next best gift of God to man *after bread*," the pious author of a Latin "Hymn to Tobacco," styles it "the gift of Heaven and the ornament of the earth." Hence is here submitted a picture of this ornament of the earth, to the judgment of the reader, who in making it up will please remember to *drop the worm!* By-the-by, it ought to be explained that his wormship is never caught, as here exposed, reposing on the *top* leaf; but there was not room to display an entire plant, and to place the beautiful object where he delights to "revel," that is, on the most delicate and richest parts of the prime leaves below, eschewing the coarsest and greenest portions of the leaf and stems, while his fell destroyer, Man, (not the turkey,) with less delicacy of discrimination, eschews none, but *chews* all the manufacturer gives him, with some not very nice additions, such as copperas, &c. [The reference here is to an engraving.]

The narcotic properties of tobacco, to which it owes its fascinating powers, remind us not only of the "Confessions of the Opium-Eater," but of the effect also of the "*betel-root*," and another substance called "*churrus*," of the East Indies, were both are freely used, both as medicines and as opiates, having the power to beguile the imagination with the most delightful reveries. The similarity in the medical properties with those of tobacco, even suggest, if our planting friends will excuse the intimation, whether these Asiatic drugs may not at some future day, as yet it is to be hoped deeply wrapped in the womb of Time, be made to take the place of our great staple. Would it not, in a word, be more lamentable than strange, were the starveling natives of the East (called free) to supply, in the process of time, substitutes for two of the great products of the planting States, one entirely and the other in a great measure the product of Slave Labor—a labor with us so much better provided and more kindly cared for than any laboring class in Europe?

The *churrus*, above alluded to, is an *extract from hemp*, the *Cannabis Indica*. If what is said of the betel-nut be true, it ought certainly to be introduced into the veterinary practice of our country, than which practice nothing, no art, certainly, can well be in a lower or more rude and unsatisfactory state.

We might here introduce, were it only for the reason last stated, a more extended notice to illustrate their similarity, in effects, to the narcotic of which we

e treating, but that it would swell this article to an immoderate length, and
we shall assign it, if we can, another and contiguous position—contenting our-
lves here with this reference to it as a matter that may repay the attention of
e curious reader. But again to the subject in hand.

IV.—SUGAR MAKING IN LOUISIANA.

New Orleans, January 29th, 1848.

V. E. Thompson, Esq.

Sir:—To answer your inquiries as to the results of the different methods f Sugar making now in use upon the plantations in this State, I deeply regret hat I cannot give you the full data of a crop taken this season by each method. To o this would require the correct information possessed only by the Planters who ave used each method. But to fulfil your wishes as far as I am able, I offer the ollowing remarks accompanied by two tables—the first table, showing in the ast column, the "Scarsdale" crop taken off by Mr. Theodore J. Packwood with three pan "N. Rillieux Apparatus," as contrasted with the other methods herein shown. The second table will show you the results by four different methods of taking off a crop of 800,000 pounds first Sugar.

There are now in Louisiana eight different methods used in making Sugar, viz:

1st—The Old Set of Kettles.
2d—Set of Kettles for Syrup, and Strike High Pressure Steam Pan.
3d—Set of Kettles for Syrup, and Strike Vacuum Pan.
4th—Open High Pressure Steam Pans for Syrup and Strike.
5th—Open High Pressure Steam Pans for Syrup and Strike Vacuum Pan.
6th—One Syrup and one Strike Vacuum Pan, Clarifiers and Filterers.
7th—"Desgrand's" Apparatus, Clarifiers and Filters.
8th—N. Rillicux's Three aad Four Pan Apparatus, Clarifiers and Filters.

The first and second methods give very nearly the same Sugar and exactly the same quantity. Nearly the whole profit from a Steam Battery arises from the boiling of the Molasses. The different Strike High Pressure Pans give the same result, but the Worms are the best, as they cost less, and are easier kept in repair—same consumption of fuel, from three to four cords to the 1000 pounds Sugar.

3d. Sugar made in Set of Kettles and finished in a Vacuom Pan of any description, when well made, is worth 1-2 *a* 3-4 cent per pound more than when made by Kettles alone. The profits arising from a Strike Vacuum Pan pay back twice the outlay in one crop. There is no saving of fuel.

4th Method—Sugar made in Open High Pressure Steam Pans is worth less by 1-4 *a* 1-2 cent per pound than if made in the Set of Kettles, and the consumption of fuel is 15 to 25 per cent. greater.

5th Method is inferior to the Set of Kettles and Strike Vacuum Pan, and the consumption of fuel 15 to 25 per cent. greater.

6th Method gives as much and as good Sugar as the next following, but consumes from 3 to 3 1-2 cords of wood to 1000 pounds Sugar.

7th Method I think ought to give as much and as good Sugar as the following, but has not yet done so—consumes 1 1-2 *a* 1 3-4 cords of wood per 1000 pounds Sugar.

8th Method gives as much Sugar as the beforementioned 6th and 7th methods and better Sugar than all the other methods. The Three Pan Apparatus consumes from 9-10 to 1 1-2 cords wood per 1000 pounds Sugar, the Four Pan Apparatus from 1-2 to 3-4 cords per 1000 pounds Sugar.

The 1st and second methods are in general use in Louisiana, the first table shows the result. The profit of a Steam Battery arises from the boiling of the Molasses.

The 3d Method—the Vacuum Pan, is used as a Strike Pan on the following Plantations: Messrs. Morgan's, Gordon's, Millaudon's, Judge Butler's, Colonel Keys', Urquhart's, Davenport's, Kittridge's, P. Rillieux's and Poydras's.

Messrs. Morgan and Gordon make Syrup Mould Sugar. Messrs. Urquhart sold their unsyruped hhd. Vacuum Pan Sugar at 1-2 cent per pouud more than that made by their Set of Kettles. P. Rillieux sold his Vacuum Pan Sugar in hhds. at 3-4 cent more than his Kettle Sugar.

The 4th Method is used by Messrs. R. Wilkinson and Forstall. I have no certain information about Mr. R. Wilkinson's—Mr. Forstall's, it is said, consumes 4 *a* 5 cords of wood per 1000 pounds sugar, and the sugar is of lower quality than by a Set of Kettles. His Apparatus, including the Filters, cost $12,000.

FIRST TABLE.

Showing the Value of a Crop of Cane made into Sugar by six different Methods, into hogsheads without being Syruped, at the price each kind has been sold at, or is worth this season.

Boiling power required to take off such a Crop—8,000 Pounds.

Method 1st.		Method 2d.		Method 3d.	
The old Set of Kettles.		*Set of Kettles and Steam Battery.*		*Set of Kettles and Vacuum Pan.*	
Price 2 sets apparatus,	$2,000	2 sets and 1 steam pan,	$2,500	2 sets and 1 vacum pan,	$4,000
1515 cords wood used.		1515 cords wood used.		1515 cords wood used.	
653,367 lbs. dry sugar.		653,368 lbs. dry sugar.		653,367 lbs. dry sugar.	
433,000 lbs. first sugar at 4½ cents,	$19,485 00	433,000 lbs. at 4½ cts.	$19,485 00	433,000 lbs. at 5 cts.,	$21,650 00
43,300 lbs. cistern bottom at 2 cents,	866 00	153,500 lbs. second sugar at 2¾ cents,	4,221 25	162,000 lbs. second sugar, at 3¼ cents,	5,265 00
26,734 gallons molasses at 18 cents,	4,812 12	13,857 gals. at 18 cts.,	2,494 12	12,874 gals. at 18 cts.,	2,317 32
Total,	$25,163 12		$26,200 37		$29,232 32
Plantation expenses,	7,000 00	Plantation expenses,	7,000 00	Plantation expenses,	7,000 00
Net proceeds,	18,163 12	Net proceeds,	19,200 36	Net proceeds,	22,232 32
Profit method 8,	13,440 43	Profit, &c.,	12,403 00	Profit, &c.,	6,371 23

The price of N. Rillieux's 3 pan Apparatus—8,000 pounds boiling power, set up, $10,000.

Method 4th.		Method 5th.		Method 8th.			
Altogether high pressure Pans with Filters.		*High pressure Pans and Strike Vacuum Pan, with Filters.*		*N. Rillieux's Three Pan Apparatus.*			
				Sugar as made by T. J. Packwood.		Sugars boiled as high as by Mr. Lesseps.	
		Osgood and Johnson,	$10@12,000				
Mr. Forstall's,	$12,000			Apparatus,	$10,000	Apparatus,	$10,000
1948 cords wood used.		1948 cords wood used.		550 cords wood used.		550 cords wood used.	
653,368 lbs. dry sugar.		653,367 lbs. dry sugar.		653,367 lbs. dry sugar.		653,366 lbs. dry sugar.	
433,000 lbs. at 4 cents,	$17,320 00	433,000 lbs. at 5½ cts.,	$23,815 00	440,000 lbs. at 6¼ cts.,	$27,500 00	478,500 lbs. at 6 cts.,	$28,710 10
153,500 lbs. at 2½ cts.,	3,837 50	162,000 lbs. at 3½ cts.	5,670 00	193,000 lbs. at 4¾ cts.,	7,742 00	141,000 lbs. at 4½ cts.,	6,345 00
12,857 gals. at 18 cts.,	2,494 12	12,871 gals. at 20 cts.	2,574 80	11949 gals., at 20 cts.,	2,389 80	10,041 gals. at 20 cts.,	2,008 29
Total,	$23,651 62		32,059 80		37,632 30		$37,063 29
Loss or saving in wood, 433 at 2¼	974 25	Loss or saving in wood, 433 at 2¼	974 25	Saving in wood 995 at 2¼	2,171 25	Saving in wood, 965 at 2¼ cts,	2,171 25
Bone black expenses,	200 00	Bone black expenses,	200 00	Bone black expenses,	200 00	Bone black expenses,	200 00
Total,	$22,477 37		$30,885 55		39,603 55		$39,034 45
Plantation expenses,	8,000 00	Plantation expenses,	8,000 00	Plantation expenses,	8,000 00	Plantation expenses,	8,000 00
Net proceeds,	14,477 37	Net proceeds,	22,285 55	Net proceeds,	31,603 55	Net proceeds,	31,034 45
Profit meth. 8	17,126 18	Profit, &c.,	8,718 00		....	Profit, &c.,	566 10

The 5th Method is used on the Plantations of Messrs. Gordon, Johnson and Osgood, with Filters. Mr. Gordon has given up his Syrup High Steam Train on account of the great consumption of fuel, and gone back to the 3d method with Filters. Mr. Johnson has made his whole crop in Syrup Mould Sugar and sent it to New Orleans in hhds. marked A. B. and C.,—sold at 7 1-4, 6 1-2 and 6 1-8. Mr. Osgood has made unsyruped hhd. Sugar which sold from 5 *a* 6, and olasses Sugar 3 1-2 cents per pound. This Apparatus consumed from 4 to 5 rds wood per 1000 pounds Sugar.

The 6th Method, used on the plantations of Messrs. Wilkinson, Morgan and nin. Mr. Wilkinson's works very well and makes good Syruped Sugar—the ice unknown. His hhd. Sugar sold at 6 cents per pound. This gentleman inks that his Apparatus consumes 3 1-2 cords of wood per 1000 pounds of gar—the Apparatus 8000 lbs. boiling power. I am not informed if Mr. Morn has used his two Vacuum pans this season. He took off his crop in Syrup ould Sugar—price unknown. Mr. Janin has a splendid Refinery—having no od on his plantation, he uses altogether coal to take off his crop. I have no act data either of consumption of fuel or boiling power of his Apparatus, but I nk he must consume nearly as much as Mr. Wilkinson, which would require barrels of coal per 1000 pounds of Sugar, at 5 barrels per cord of wood. As Apparatus worked this year its boiling power is 25 to 50 per cent greater than . Wilkinson's.

SECOND TABLE.

owing the Value of a Crop of Cane made into Sugar by Methods 6, 7 and 8, in hhd. Sugar without being Syruped, at the prices each have been sold at this season.

15,000 to 16,000 pounds, boiling power Apparatus:

Method 6th.		Method 7th.		Method 8th.			
ouble Vacuum Pans.		*Desgrand's Apparatus.*		*3 pans—Rillieux's Apparatus.*		*4 pans—Rillieux's Apparatus.*	
000 val. apparatus. 0 cords wood used		$24,000 val. apparatus. 1,400 cords wood used.		$18,000 val. apparatus. 1,000 cords wood used.		$20,500 val. apparatus. 540 cords wood used.	
,000 lbs. rst sugar t 6 cts.	$48,000 00	800,000 lbs. first sugar at 6 cts.,	$48,000 00	800,000 lbs. first sugar at 6½ cts.,	$52,000 00	800,000 lbs. first sugar at 6½ cts.	$52,000 00
,000 lbs. 'd sugar 4 cts.,	11,400 00	285,000 lbs. sec'd sugar at 4 cts.,	11,400 00	285,000 lbs. sec'd sugar at 4¾ cts.,	13,537 75	285,000 lbs. sec'd sugar at 4¾ cts.	13,537 75
00 galls. olasses 20 cts.	3,100 00	15,500 gals. molasses at 20 cts.	3,100 00	15,000 galls. molasses at 20 cts.	3,100 00	15,500 galls. molasses at 20 cts.	3,100 00
otal,	62,500 00	Total,	62,500 00	Total,	68,637 75	Total,	68,637 75
ntation penses, c.,	10,400 00	Plantation expenses, &c.,	10,400 00	Plantation expenses, &c.,	10,400 00	Plantation expenses, &c.,	10,400 00
alance, ving of ood,	52,100 00	Balance,	52,100 00	Balance,	58,237 00	Balance	58,237 75
		1200 cords at $2¼,	2,700 00	1600 cords at $2¼.	3,600 00	2060 cords, at $2¼,	4,635 00
proceeds,	52,100 00	Net proceeds,	54,800 00	Net proceeds,	61,837 75	Net proceeds,	62,872 75
fit over ethod 6,		Profit over method 6,	2,700 00	Profit over method 6,	9,737 75	Profit over method 6,	10,772 75

The 7th Method, Desgrand's Apparatus, built by Messrs. Allen, Stillman & ., at the Novelty Works foundry, New York, is used on Messrs. Valcour me and Lapice's plantations. I do not believe the boiling power of these two aratus over 14,000 and 18,000 lbs. sugar in 24 hours; their apparatus conned 1 1-2 *a* 1 3-4 cords wood per 1000 lbs. sugar. Mr. Valcour Aime made uped mould sugar and hhd. sugar. I am not informed of the price of sales of sugar. Mr. Lapice made syruped tiger sugar, sent to New Orleans in hhds., rked No. 1, 2 and 3, sold at 7, 6 and 5 cents.

The 8th Method, N. Rillieux's patent three and four pan apparatus, built by ssrs. Merrick & Towne of Philadelphia, assignees of N. Rillieux's patent, is use on the following plantations: Three pan apparatus on Mr. S. Packwood's, 000 lbs. apparatus; Mr. Lesseps, two apparatus of 12,000 lbs.; Messrs. rphy & Gardanne, one of 6000 lbs.; Messrs. Chauvin & Levois, one of 9000 .; Mr. Camile Zeringue, one of 9000 lbs.; Mr. Theodore J. Packwood, one of 000 lbs.; four pan apparatus on Messrs. Benjamin and Packwood's, 18,000 . apparatus; Messrs. Armant and Brother 24,000 lbs. apparatus.

The boiling power of all these apparatuses is 1-3 greater than their nominal power. Mr. T. J. Packwood's Three Pan Apparatus consumed this season 9-10 cord of wood per 1000 pounds Sugar—Mr. Lesseps Two Apparatus 1 1-4 cords wood per 1000 pounds Sugar—Messrs. Armant and Brother's Four Pan Apparatus 2-3 of a cord of wood per 1000 pounds Sugar.

Mr. T. J. Packwood has made this season the best unsyruped hhd. Sugar—his first Sugars sold at 6 1-2 cents, his Molasses Sugars 4 1-2 *a* 5. Messrs. Benjamin and Packwood have made the best Syrup Tiger Sugar, sold at 8 cents per pound, and I have been told that Messrs. Armant and Brother made the best Syrup Mould Sugar.

The first table shows the result of a crop which, by the set of kettles, gives 433,000 pounds of Sugar—taken by methods 1, 2, 3, 4, 5 and 8—the worst method is the 4th; the last line of the table gives the profit by method 8 over each of these, and allowing a deduction of $2000 for the vacuum pan already in use in method 3 and 5, the profit of one crop exceeds the entire cost of N. Rillieux's apparatus.

The second table shows the proceeds of a crop of 800,000 pounds of first Sugar, taken by methods 6, 7 and 8, in unsyruped Sugar—such a crop requiring a 16,000 pounds boiling power. The profit over method 6, by method 7 and 8—three and four pan Apparatus—are $2,700, $9,737 75 and $10,772 75. But, in supposing by some improvement and better management, each method could give the same crop, as well in quantity as quality, then the difference will be only in the saving of fuel; and the yearly profit of 7 and 8—three and four pan Apparatus—over method 6, will be only $2,700, $3,600 and $4,635. And, allowing that capital invested in apparatus ought to return 20 per cent, those last Apparatus are worth $13,500, $18,000 and $23,175, more than Apparatus of 6th method. Therefore, if a double vacuum pan Apparatus of 16,000 pounds boiling power is worth $18,000, then comparatively a Desgrand of same power is worth $31,500, and a three pan N. Rillieux apparatus of same power $36,000 and a four pan N. Rillieux apparatus of same power $41,175.

If a Desgrand apparatus of that boiling power costs $24,000, then the price of a double vacuum pan comes down to $10,500 and N. Rillieux's three and four pan apparatus to $28,500 and $33,675.

If N. Rillieux's three pan apparatus costs $18,000, then the double pan are worth nothing, the Desgrand's $13,500 and N. Rillieux's four pan apparatus $23,175.

If a 16,000 lb. boiling power of N. Rillieux's four pan apparatus costs $20,500 then the double vacuum pan apparatus set up ought to be given for $2,675 less than nothing, the Desgrand's for $10,825 and N. Rillieux's three pan apparatus for $15,325.

Mr. Wilkinson's 8000 boiling power double vacuum pan apparatus has been built by that gentleman in adding part to part, but it would cost if made now at once, and set up, $12,000; it consumes 3 1-2 cords of wood per 1000 lbs. Sugar. A 6000 lb. N. Rillieux's three pan apparatus of 8000 lb. boiling power, costs, set up, $10,000, and saves 2 1-4 cords of wood per each 1000 pounds Sugar—making a saving on a crop of 400,000 lbs. Sugar, 400 at 2 1-4 cords of wood at $2 25 per cord, $2,025; say $2000, at 20 per cent.—then 6000 pound three pan N. Rillieux Apparatus is worth $10,000 more than Mr. Wilkinson's double vacuum pan apparatus.

If, as I believe, the foregoing is correct, and if an outlay in apparatus should give as much as 25 per cent. yearly, then you perceive that at the price Messrs. Merrick & Towne sell the "Rillieux Apparatus," preference should be given to the double vacuum pan apparatus, only if they can be had already set up for nothing, and Desgrand's Apparatus is only worth half the price of Rillieux's four pan, and three-fourths of the price of Rillieux's three pan apparatus, of same boiling power. Respectfully yours, N. RILLIEUX.

RILLIEUX'S METHOD.

Note.—Other results have been furnished than those above afforded. Elihu Thomson, Engineer, who took off the two last crops of Messrs. Armand & Brothers, with a 24,000 pound Rillieux four-pan apparatus, says, that they have run it at the rate of 32,000 pounds in twenty-four hours with perfect ease; and, that on a trial made in presence of Mr. Valcour Aime's Engineer and others, on e 5th of January last, they proved by actual measurment that the consumption of wood was but ne half cord per 1000 pounds Sugar. Mr. C. G. Allen, the Engineer who took off the last two rops for Mr. Camille Zeringue, with a 9000 pound N. Rillieux three-pan apparatus, says that they made 21,000 pounds first Sugars and 3,500 pounds second Sugars in forty eight hours. Mr. Lesseps' 2,000 pound N. Rillieux three-pan apparatus has made 16,000 pounds first Sugars and 6000 pounds Molasses Sugars in twenty four hours. And similar results have been produced with other of these Apparatus.

In turning to the last Report of Professor McCulloh, to Congress, we find the following passage, which, in this connection, is worthy of insertion.

"The use of the latent heat of the vapor from one portion of sirup, for the evaporation of another portion, has been accomplished far more perfectly and fully by an apparatus invented by N. Rillieux, of New Orleans, than by the system of M. Dérosne. This apparatus has also the merit of being simpler, and therefore more easily constructed or repaired, so that it is less expensive, and less liable to derangement. It may now be considered as fully tested, and as perfectly successful; so that it may be adopted with entire security and certainty of results.

"The distinctive feature of N. Rillieux's system may be said to be the successive use of latent heat for the evaporation of sirups, by a series of similar boilers or close evaporating pans—each being heated by the vapor from the preceding one, and in turn furnishing heat to the succeeding boiler. The first series is heated by high steam from the boiler of the steam-engine used for grinding the cane, and the last used as a vacuum pan for concentration. The vacuum is produced by means of an air-pump worked by the steam-engine. Any one of the series of boilers, at pleasure, may also be connected directly with the steam-pipes, by means of cocks and tubes suitably arranged; so that it may at any moment be heated by high steam if desired. The boilers are cylindrical, and are heated by numerous internal tubes; they therefore resemble somewhat the boiler of the locomotive engine as at present usually constructed. The series consists of either three or four boilers; but the number might be extended, if the increase would give sufficient additional advantage to render it expedient. (Plates V, VI, and VII, and the descriptive text, will give an accurate idea of this system.)

"This apparatus is constructed by Messrs. Merrick and Towne, of Philadelphia, machinists of established reputation for intelligence and superior skill, and who have become the assignees of Rillieux's patent. To the excellence of the workmanship of these gentlemen, no less than to the merits of the system itself, is to be attributed its entire success.

"The beauty and superior grain of the sugar manufactured by those who have adopted Rillieux's train does not depend, however, upon the merits of that train alone. The juice, after defecation with lime in defecators similar to those employed by the beet-sugar makers of France, is filtered first through cloth, and then through boneblack; after which it passes successively into the first, second, and third boilers. In the third boiler it is concentrated to 27 deg. Beaumé; and it is then again filtered before it enters the fourth or last pan, to be evaporated in vacuo. The filters employed are the leaf filter of Lovering, and the filter Dumont. If a train of three boilers be used, then the juice is concentrated to 27 deg. in the second, and evaporated in vacuo in the third. From the above, it is evident that Rillieux adopts the method employed in France for clarifying beet juice, and which M. Derosne has applied successfully to the juice of the cane in the West Indies as above mentioned. And if cane juice be thus treated, a perfect article will, as already stated, be manufactured from it by evaporation in vacuo, whatever may be the vacuum pan employed. While, therefore, we must ascribe to N. Rillieux's system of boilers the advantage of superior economy in the use of fuel, and to the apparatus, as executed by Messrs. Merrick and Towne, the merit of simplicity, and consequent perfection of mechanical arrangement, as well as of excellent workmanship, we yet must consider other systems as equally capable of producing sugars of a perfect quality in grain and color, provided they be properly combined with filtration and use of boneblack.

"To planters who are obliged to depend greatly upon the begassa of the crop for their supply of fuel, Rillieux's system presents great advantages over all others; for the economy of fuel is so great in it that the begassa alone is amply sufficient for the crop, even in Louisiana where the immature nature of the cane and the humidity of the climate are far less favorable for drying begassa, and where, therefore, this article is much inferior to that used in the West Indies. But if fuel be abundant, an open steam evaporating pan for concentration to 27 deg. Beaumé, and a simple vacuum pan, either that of Howard or that of Rillieux, will give equally satisfactory results; the juice being in each case similarly defecated and filtered through boneblack.

"When in Louisiana I visited the plantation of Messrs. Benjamin and Packwood, at their invitation, and carefully examined the apparatus of Riellieux, constructed for them by Messrs. Merrick

and Towne. From what I learn from those intelligent gentlemen, as well as from what I then sa I can bear witness to the entire success of the system."

VI.—COTTON BALED WITH IRON HOOPS.*

NEAR YAZOO CITY, January, 1848.

J. D. B. DE BOW, Esq.

A correspondent of the Review, in the December Number, writing from Burtas, Alabama, over the signatnre of "An Alabama Planter," communicates what purports to be a letter from a mercantile house in Mobile, (without any signature) on the subject of Banding Cotton Bales with *Iron Hoops* instead of *Rope*, and he makes a personal request of me that I would reply to that communication, because he thinks it defective in its reasonings on the subject; and he is pleased to do me the honor to suppose that I am practically acquainted with the question in hand.

I could not consent to make a public reply to the Mobile letter, without expressing an opinion adverse to its authenticity. I suppose your friend in Alabama has been imposed upon by means of a spurious letter. No merchant in Mobile can, upon reflection, entertain the views therein expressed; nor can any man, whether he has ever seen a bale of cotton or not. For instance, the letter says:—"All cotton is pronounced unmerchantable that has other than good *grass* or *hemp* ropes on it." Cotton cordage is used for this purpose to some extent, and it is known to be superior or a least as good as hemp or grass. (It is superior only because if exposed to the weather a long time it will last without rotting much longer) and I presume it is difficult to conceive why cotton, if offered for sale in Mobile in *cotton ropes*, should be pronounced "unmerchantable."

Again the letter says that, "in loading a ship, the cotton is driven by means of jack-screws so tight that iron hoops would break." An expansive pressure from the inside ot the bale outwards, would, I should suppose, cause the hoops to break if they were not strong enough. But I should hardly think that a pressure on the *outside* of the bale would produce the same effect.

The entire paragraph from which the last quotation above is taken, reads as follows:

"Could you even put up your cotton in the size of compressed bales, we think it would be best to use hemp ropes. In loading a ship the cotton is driven by means of jack-screws so tight that iron hoops would break—where rope would only be loosened and removed a little, and when the cotton is turned out the expansion immediately fastens the ropes again—even though cotton is compressed as well as can be done; in stowing ships it is often driven so hard, by means of jack-screws, that ropes are loosened, and shippers say that the iron hoops would break."

A very great advantage of iron hoops over rope, in banding cotton bales, is well known and has always been admitted to be, that the bales are much easier handled, particularly in loading and unloading vessels, and the above paragraph from the Mobile letter was intended, I suppose, to set forth, ironically, this advantage. In stowing ships with cotton a great number of bales have to be dragged endwise, upon other bales, half the length of the hold or more; and in finishing, not a few have to be driven, by means of jack-screws, a long distance into appartures scarcely large enough to receive them. The outward pressure of the bale (up and down as it lay in the press, for there is very little sidewise) causes it to swell an inch over the band, on the two sides which may be called the top and bottom. The two other sides of the bale (of cotton in ropes) has, of course, a very uneven surface—the ropes on one side and ropes and knots on the other. In driving these bales into a small hole between other bales, with like ropes and knots, they frequently hitch against each other, the knots become torn loose and the ropes dragged off. This is what the letter, in the jesting pleasantry of the writer, alludes to in saying "the ropes are *loosened*."

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* For the convenience of those desirous of consulting, we will make a brief index of all the references to the subject of Cotton, its Culture, its Manufacture, etc., in the volumes of the Commercial Review already published. Vol. I, p. 73, 74, 230, 274, 231, 234, 363, 387, 237, 283, 291, 307; vol. II, p. 133, 279, 135, 139; vol. III, p. 1, 18, 340, 439, 537, 542, 583, 445; vol. IV, p. 394, 256, 87, 250, 255, 544, 558, 525, 511; vol. V, p. 75, 163, 186, 189, etc., ect.—EDITOR.

All these inconveniences are, of course, avoided by the use of hoops. From onversations I have had with ship masters and mates, and other authentic information *from them*, I have been surprised to learn that in consequence of the ifficulties above alluded to, it is by many said to be double the labor to stow a hip with cotton in ropes that it would be with bales in hoops.

The letter again says: "A few years ago a lot of cotton came to this port with ron hoops, but it was pronounced unmerchantable, because in compressing, the hoops had to be taken off and ropes substituted."

"*In compressing?* I thought the principal object in putting cotton in iron hoops, was to put it into *shipment size* at once. It certainly would be very unwise to put iron hoops on bales which would have to be re-pressed.

Your correspondent is certainly correct in supposing we can make our bales in good shipping size on the plantation, and thus entirely avoid the expense of re-pressing. And we can, at the same time, secure other advantages. One of which is the facility in loading vessels, and consequent lessening of freight. I had a conversation with several ship masters on this subject, the last time I was in Mobile, who were then taking in cargoes of cotton at that port. They expressed the uniform sentiment I have invariably heard from *that quarter*, viz. an unqualified wish that iron hoops would take the place of ropes upon cotton bales; and a readiness to take cotton in hoops at reduced rates of freight, on account of the greater ease with which they can stow and unload their ships, and the greater security from loss by fire.

If there is a mercantile, or any other, objection to the use of iron hoops on cotton bales, it ought to be fairly and seriously stated, and if there be none, then every planter ought to use them. I am well persuaded there is none, except that it is adverse to the interest of those who are connected, directly and indirectly, by sympathy, friendship, and otherwise, with the steam cotton presses at the import cities.

It ought to be remarked, however, that bales may be so banded with hoops, and no doubt frequently are, as to be unfit for shipment. I once saw a lot of cotton in Yazoo City, banded up in iron bands in so awkward and clumsy a manner, that the cotton ought to have been pronounced "unmerchantable," whether it was or not. When I speak of cotton in hoops, I mean that the bales are to be of the size they come from the steam presses—say 22 to 24 square, and 4 feet 6 inches long—the hoops of proper size and well riveted. The process of putting them on is very simple, and much faster than tying ropes. I would willingly communicate directly with your correspondent on this, or any other subject connected with "*our craft*," and interchange any useful information.

Very respectfully, yours, &c..

R. ABBEY.

VI.—RILLIEUX'S SUGAR MACHINERY.*

J. D. B. De Bow, Esq.,

I beg leave to call your attention to some important points for the consideration of the sugar planters. Professor McCulloh in his last report to Congress, on the subject of sugar making, says on page 86: "To planters who are obliged to depend greatly upon the bagasse of the crop for their supply of fuel, Rellieux's system presents great advantages over all others; for the economy of fuel is so great in it, that the bagasse alone is amply sufficient for the crop, even in Louisiana, where the immature nature of the cane and the humidity of the climate are far less favorable for drying bagasse, and where, therefore, this article is much inferior to that used in the West Indies. *But if fuel be abundant, an open steam evaporating pan for concentration to 27 degrees Beaume, and a simple vacuum pan, either that of Howard or that of Rillieux, will give equally satisfactory results; the juice being in each case similarly defecated and filtered through bone black.*"

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* We received this letter from Mr. Rillieux since the insertion of the paper relating to his apparatus, etc. It is proper [illegible]t the reader should have all the information that can be obtained. The ubject is full of interest. Mr. Rillieux requests us to insert the name of Maunsel White among those who use the "vacuum pan as a strike pan," it having been left out by mistake. He also suggests a mistake in estimating the power, cost and capacity of Messrs. Valcour Aime and Lapice's machinery, viz: the power should be 14,000 lbs.; 24,000 in twenty-four hours; cost $4,000 and $30,000. It is scarcely necessary for us as editor of this Review, to say that we are willing to hear the whole truth in every matter, and keep our paper open to either side.—EDITOR.

Since Mr. McCulloh was in Louisiana many apparatus have been used, and among them the kind above referred to by Messrs. Gordon, Johnson and Osgood, and the result is far from being as satisfactory as by the "N. Rillieux's Apparatus." The sugar is inferior in quality and the consumption of fuel is from 15 to 25 per cent. greater than by the common set of kettles. It is true, however, that such apparatus or a double vacuum pan apparatus, if properly built, will give as good and as much sugar as the Rillieux's, and consume no more wood than a good set of kettles. But neither Professor McCulloh nor any other writer on Sugar Apparatus has yet pointed out the indispensable requisite to obtain such a result; and the apparatus built in this or any other country are a positive proof that the builders are not aware of this requisite. Now I will endeavor to come to a true estimate of the relative value of these apparatus of the same boiling power, giving the same quantity and quality of sugar. One an open steam evaporating pan and strike vacuum pan—one double vacuum pan apparatus—and a N. Rillieux's three pan apparatus. Thus:

Lowest estimated cost of 1st *and* 2d 8000 *lbs. boiling power apparatus, as compared with a* 3 *pan N. Rillieux apparatus of same boiling power.*

8000 lbs. boiling power. Sufficient to take off a crop of 440,000 lbs. first sugar.

	Apparatus 1st. Open Steam Pan and Strike Vacuum Pan.			Apparatus 2d. Double Vacuum Pan.			Apparatus 3d. 3 Pan N. Rellieux.		
Consumption of wood pr. each 1000 lbs. of first sugar	3½ cords			3½ cords			1¼ cords		
Consumption for the whole crop	1540 cords			1540 cords			550 cords		
Saving of wood by N. Rillieux	—			—			990 cords wood @ $2½		$2,287 50
Clarifiers		$600			$650		3	$900	
Filters	6	600		6	600		6	750	
Vats for filtered cane juice and syrup	2 wood	100		2 wood	100		2 iron wrt.	250	
Boiling app'tus: Open steam pan	1	800			—		—	—	
Boiling app'tus: Vacuum pans	1	1,600		2	3,000		3	5,100	
Air pump and connect'n to the mill engine	1	300		1	500			—	
Pumping engine								1,800	
100 feet 32 in. boilers; wanted besides the mill engine boilers, with pipes, valves, &c		1,500			1,500			—	
Cast iron and copper conn'g pipes for app. cocks, valves, &c.,		600			850			800	
Cost of setting up		300			300			400	
Total		—	$6,400		—	$7,500		—	$10,000 00
Brick work for setting 4 40 feet × 32 inch boilers, furnace and chimney, 80000 bri'ks		800			800			—	
Lime and laying		200			200			—	
Fixing the mill engine furnace and foundation for the pumping engine		—			—			300	
Carpenter's work		500			500			500	
Total		—	1,500		—	1,500		—	800 00
Whole cost			$7,900			$9,000			$10,800 00
Fuel saved first crop		—			—				2,287 50
Actual cost of the app. after the first crop			$7,900			$9,000			$ 8,512 50

table shows the prices of the three different apparatus, each of 8000
power, set up, including brick work and carpenter's work, to be
0 and $10,800. Now the saving of fuel by the last apparatus on
of 440,000 lbs. of first sugar is $2,237 50, and if this saving be
e price of that apparatus, then they stand thus: $7,900, $9,000 and
nd the 3 Pan N. Rillieux Apparatus costs less by $437 50 than the
um Pan Apparatus, and $657 50 more than the Open Steam Pan
Pan Apparatus after the first crop. And if 20 per cent. be a fair
tlay in apparatus, then the 3 Pan N. Rillieux Apparatus, which
ly $2,237 50 in fuel, is worth $11,137 50 more than the two other
The price of a "N. Rillieux" 3 Pan 8000 lbs. Boiling Power Appa-
complete, including the brick and carpenter's work, being $10,800,
worth, set up, brick and carpenter's work included, $337 50 *less*
--and if the planter has to pay for the brick and carpenter's work as
e builders of those two apparatus ought to give them, set up com-
,837 50 besides, to the planter, to put him in the same economical
f he had purchasud the N. Rillieux Apparatus.

Yours, Respectfully,
N. RILLIEUX.

MONTHLY COMMERCIAL SUMMARY.

F BRITISH TRADE UPON AMERICAN PROSPERITY; AMERICAN STATE
D FINANCES; REVENUE OF THE UNITED STATES AND EXPENDITURES;
ND EXPORTS PORT OF NEW YORK; BRITISH FINANCIAL AFFAIRS;
ON AND MANUFACTURE OF COTTON; BRITISH CORN TRADE; AFFAIRS
D, ETC.

he extreme pressure of the money market, growing out of this con-
rs in England, has apparently passed, and affairs present the aspect
ase. The past year has been fruitful of experience, and the prospect
year is now better for the planting interests than the last few months
d, but not so much so for the farming interest in comparison with its
ity in the past year. We have on former occasions adverted to the
ition of England, in regard to the connection of its financial and in-
ests, with the welfare of American producers; it is necessary to bear
eading features of the English markets, since their connection with,
upon, those of the United States have been far more intimate, and
n was generally anticipated. It has become evident that a rapid
ployment among any considarable mass of persons, in England, is
the greatest results on American producing interests. As thus,
r, there were employed in the cotton manufacture of Great Britian
ns including all its branches; of the articles produced by these per-
in round numbers at £43,000,000, say $200,000,000; 40 per cent.
00,000, was consumed at home, the remainder, $120,000,000, was
l parts of the wor d, in payment for such raw material and foreign
as necessary for British consumption. This employment, in con-
various other branches of British industry, producing an equal ex-
e, was the means by which the wants of the country from abroad were
large portion of the other industry of Britian is applied to the produc-
nd necessaries for the supply of these manufacturers of exports, but
of all artisans are not usually such as to enable them to purchase as
d foreign produce as their necessities require. During the past year
ns, being two-thirds of the number of those employed in the cotton
ken from their usual occupaticns and employed upon rail roads, in
xtra wages. In Ireland, pursuant to the relief movements of the
he number of persons employed upon public works was raised from
ctober 1846, to 734,000, in March 1847 this number, with their de-
stituted one half of the population of Ireland, living at the govern-
. The English rail road expenditure gave the people means of buy-
f food and foreign produce, while they were propucing nothing that
orted in return. While, in Ireland, the large sums expended in

wages to laborers, were used in the purchase of foreign breadstuffs and produce, until March 1847, when the necessity of discharging the laborers from the public works in Ireland, in order that they might return to agricultural employments and produce food, instead of making roads, was apparent and the government discharged them at the rate of 20 per cent. per month, until, in July, the government expenditure had ceased. The labor of these persons upon public works was nearly thrown away, it produced neither floating nor fixed capital, and their sustenance was per force drawn from abroad, when re-applied to agricultural pursuits it was rewarded with a fair average harvest, by which the supply of food, for the present year, has been considerably increased. In England the growing pressure for money caused great numbers of persons to be discharged from the rail ways, and the effect was, if not immediately to return them to active employments, to deprive them of the means of consuming largely of foreign produce and thus favorably effecting exchanges. This decreased consumption is indicated in the returns of taxes upon consumable articles as embraced under the heads of customs, excise and stamps, for the quarter ending January 5, 1848, as follows:

BRITISH INDIRECT TAXES.

Quarter ending Jan. 5.

	Stamps.	Excise.	Customs
1847 - - - - - - - - - - - - -	1,740,687	3,608,155	4,514,721
1848 - - - - - - - - - - - - -	1,564,855	3,246,883	4,111,862
Decrease - - - - - - -	176,232	361,272	402,859

This is an important decrease, and shows the extent to which the late money pressure has begun to effect the means of the people, in respect of their ability to buy comforts, and those necessaries of which imported food forms a large item While their ability, to consume largely, is thus reduced, the supply of home grown food, both in Ireland and England, has considerably increased, and the old sliding scale of duties takes effect, March 1st, against that of foreign origin The duty at present prices is 4s per quarter on wheat, and 2s 6d per bbl. on flour The leading facts, in respect to food, are these, that while the home supply is larger, both in England and Ireland, the consumption is somewhat lessened by the want of employment, which the money pressure occasioned in most industrial interests, particularly cotton, iron and rail ways, and therefore, that the demand for food, particularly from the United States, is considerably less. This however is not a permanent state of things. Money in England has indeed, become very plenty, at a moment when labor is very cheap, and prices of produce very low. This is necessarily a turning point in affairs, because all enterprises will, under such circumstances, be resumed, and the tendency again be rapidly to enlarge the consumption of produce. More particularly, that, it is to be remembered, a radical change has taken place, to a considerable extent, in the staple food of Ireland. Heretofore Potatoes were almost the sole dependance, but the necessities of the past year have contributed to overcome the strong prejudices which had existed to the use of Indian Corn, a curious instance of this is given in an English official report, which we think illustrative of the influence which the distress of the past year islikely to have upon the future consumption of United States corn:

"Previous to the sale of meal being commenced, I placed a small portion in the hands of father Kenny, he tried and approved it; and in order to overcome any feeling against it, subsequently, with his two curates, all but entirely lived on the meal made into bread and stirabout, for nearly a fortnight, using all his influence to convince the people the pernicious effects ascribed to it were untrue. The success attending this measure it is quite unnecessary for me to allude to; and the merchants profiting by the example, commenced a trade new to them, by importing the article. The Society of Arts awarded a gold medal to Mr. O'Brien, Baker, of Dublin, for the attention paid by him to the introduction of cheap popular modes of preparing Indian Corn for use; and tens of thousands of pamphlets and printed sheets were distributed through the commissariat containing instruction for cooking Indian Corn. Those who know how difficult it is to induce a large population to change their habits, will be surprised at the success which attended these efforts. The "yellow meal," as it is called, was first known as "Peel's brimstone," and it was remembered that the attempts to introduce it, in a former season of distress, occasioned a popular commotion, arising from the absurd notion that it had the effect of turning those who ate it black."

e means Ireland has become thoroughly innoculated with Indian Corn, emands for the article must annually increase. It will be remembered rear, when the demand was largest, the quantity that could be furnished United States was restrained by want of the means of transportation, in- l external. Of the price, 64s per quarter, which corn then commanded nd. 20s was paid for freight. Of the 34s for which it now sells, the 4s only. One of the greatest difficulties encountered in the change from o corn diet, was the absence of the means of *grinding*. These had to be s consumption was extended. All the English government admiralty e employed grinding corn for Ireland, and all available vessels, not ex- e Yachts, were employed in carrying meal from the mills to the depots oution, and small mills imported from France, as well as large quanti- nd mills, were distributed quarterly. These are some of the great re- ight about in one year, that might otherwise not have been effected in ntury. The machinery of the trade for importing corn into, and dis- it, in Ireland is established, and means of grinding are being rapidly while the taste for the food is daily acquiring new strength among the Simultaneously with this movement such great reforms are being made, ation of landlord and tenant, as to afford the people such employment as le them to buy the corn. A very essential point. We have thus dwelt features of the Irish market, because we regard it as pregnant with a ortant future influence upon the exports of the "great valley."

lect of the circumstances of British industry, to which we have called , has been very marked on the article of cotton. The following figures r the consumption of cotton in Great Britain, and its distribution.

	1845.	1846.	1847.
d - - -	lbs. 592,581,600	598,260,000	439,277,720
spinning d 3-4 oz. per lb.	64,813,612	65,434,687	48,046,000
ight of yarn, etc. -	lbs. 527,767,988	532,825,313	391,231,720
in yarns and threads,	lbs. 136,618,643	159,401,482	119,422,254
per weight of yarn,	221,032,974	217,693,617	191,969,597
nsumption, " "	170,116,371	155,830,214	79,839,869
roduction -	lbs. 527,767,988	532,825,313	391,231,720

ost important decline is in the quantity taken for home consumption, a h is anomalous when we reflect that all other articles were so increased nption by rail way expenditure, tea, coffee, etc., etc., in particular. It is accounted for from the fact that it is not an actual falling off of one ods really purchased by consumers, but a reduction in the stocks of the ers, caused by the rail way mania, which effected all classes of society, shop-keepers were compelled, in the face of a stringent market, to pay ments on shares, under pain of forfeiture, they did so out of their rade. They kept their rail way shares good, but could not also replen- . A returning ease in the market may cause them to replenish, more rly as the we have said that all the elements of production are more to cheap goods. It must be remembered that while the demand for been thus cut off, the manufacturers have been obliged to pay more for an usual. The value of the goods produced has been computed as

	1845.	1846.	1847.
declared value yarns -	£ 6,963,235	7,873,727	5,867,000
do. do. goods	19,156,096	17,726,966	17,100,000
d - - - -	19,610,657	16,881,605	9,500,000
of production, -	£45,729,988	42,482,298	32,467,000
otton, - -	4½d. lbs 13,802,269	5d. 12,463,750	6½d. 11,688,314
t value of goods -	£31,927,719	£30,018,548	£20,798,686

as been a serious result to the manufacturing interests while they paid 0 more for cotton, they got £14,000,000 less for goods, notwithstanding the well known fact that when cotton is dear the quality of goods is very much deteriorated. The decrease in the quantities of goods and yarns exported has been as follows: 40,335,000 lbs. yarns, and 122,979,938 yards plain calicoes, and this decrease would have been much greater but for the improved business for the United States. The present state of affairs, therefore, promises well for the cotton trade for the present year, the raw material was never lower, and if to small stocks of goods in the shops is added the usual effects of cheap food in promoting the consumption of clothing, a greatly enhanced consumption may be looked for, notwithstanding a revival of the rail way expenditure.

In England the supply of food, as we have said, is good, but the cheapness of money, by stimulating anew those enterprises that enhance its consumption, may sustain the price. At the close of October the minimum rate of money in London was 8 per cent. per annum, and the amount of bullion in the Bank £8,000,000: at the close of January the bullion had risen to £12,000,000. and the Bank minimum rate of money had fallen to 5 per cent., while out of doors money could be had at 3 1-2a4 per cent. This change had been brought about by several causes, of which the paralyzation of industrial employments diminishing the consumption of imported articles, to which we have alluded, the non-payment of large amounts of bills running on England, and kiting of the London houses, are the three principles. The latter was, probably, the most efficient. When money was 8a24 per cent, in London, it was comparatively cheap in all other leading cities of the world. The leading mercantile and banking houses of London having their branches and connections in all the leading cities throughout the commercial world, easily make the markets of those cities subservient to that of London, more particularly that steam and increased means of communication afford facilities that formerly were not enjoyed. The moment a crisis is approaching, in England, the agents of the London houses, all over the world, extend their obligations, each in the sphere of its influence, and obtaining gold for the proceeds ship it to London, where, in a few weeks after this machinery is put in motion, gold pours in from every point .of the compass, strengthening the leading houses, filling up the coffers of the Bank, and renewing its ability to loan. In New York, common with most cities of Europe, the paper of those houses selling at more than 1 per cent. per month—and every packet took the proceeds, in gold, to England. The £4,000,000 of increase in bullion from October to January, shown in the Bank returns, was made up mostly of these kiting operations. The effect of which is to make money cheap in London, and dear in all other commercial cities. The hope indulged in is, that the exports of England will increase while its imports diminish, and that by this means the gold will not return whence it came, but be paid for in British exports. This, to a considerable extent, will be the case no doubt. The imports now being made into the United States are large, and may be considered to have been paid for in advance in the manner described. For the 35 days ending with the 4th of February, the imports and duties at the port of New York were as follows:

IMPORTS AND DUTIES PORT OF NEW YORK.

	Specie.	Free Goods.	Dutiable.	Total.	Duties.
1846 - -	43,221	456,068	5,765,421	6,267,245	1,738,590
1847 - -	100,098	506,118	6,431,006	7,027,222	1,677,844
1848 - -	157,209	433,527	10,931,768	11,422,404	2,774,544

This has been a large importation, and to some considerable extent on foreign account, to raise money. The amount of goods appears not to have been such as to oppress the market, but the prices remain firm under an active spring business, in the course of which exchanges fell and money became easy. The revenues of the government were very large, and had the best influence upon the price of government securities. The price of Treasury Notes fell at the close of December to about 98 1-2, but as very nearly $2,500,000 were paid into the New York custom house for duties, the rates again advanced to par, in face of an impending loan of $16,000,000. These operations, at the port of New York, are an indication of the general movement throughout the country, and manifest a strength of resource for which the Federal Government has not had full credit.

The following are receipts and expenditures of the Federal Government for the first six months of the fiscal year 1848, as compared with the corresponding period of the previous year.

UNITED STATES RECEIPTS AND EXPENDITURES.

	1846.			1847.		
	Quarter ending Sept. 30.	Dec. 31.	Total, 6 mos.	Quarter ending Sept. 30.	Dec. 31.	Total, 6 mos.
Customs - -	6,153,836	3,645,965	9,799,801	11,106,257	5,337,874	16,444,131
Lands - - -	663,702	399,545	1,063,247	832,760	908,965	1,741,725
Miscellaneous	35,011	16,000	51,011	15,670	48,500	64,170
Total regular -	6,852,549	4,061,510	10,914,059	11,954,687	6,295,339	18,250,026
Loans - - -	1,953,950	7,359,750	9,313,700	5,255,700	2,012,450	7,268,150
Total receipts	8,806,499	11,421,260	20,227,759	17,210,387	8,307,789	25,518,176
			EXPENSE.			
Civil list - -	1,644,271	2,057,887	3,702,158	1,120,453	1,641,053	2,761,506
Army - - -	8,153,659	6,891,770	15,045,429	9,186,406	3,216,518	12,402,924
Fortifications, &c.	462,627	145,884	608,511	109,158	80,069	189,228
Indians - - -	827,880	221,888	1,049,768	691,795	5,162	696,957
Pensions - - -	962,757	28,739	991,496	582,332	6,576	588,908
Navy - - - -	1,969,980	2,099,787	4,069,767	2,384,805	2,649,749	5,034,554
Interests, &c. -	67,484	1,508,654	1,576,138	624,190	1,706,793	2,330,98
Redem'n of debt	14,088,658	12,954,609	27,043,267	14,699,139	9,305,918	24,005,0

The receipts for the six months compare as follows:

	Customs.	Lands.	Miscellaneous.	Loans.	Total.
1846 - - -	$9,799,801	1,063,247	51,011	9,313,700	20,227,759
1847 - -	16,444,131	1,741,725	64,170	7,268,150	25,518,176
Decrease	....	.....	....	2,045,550	......
Increase	$6,644,330	678,478	13,159	......	5,290,417

The item "loans" represents the amount realised within the quarter on heavy notes and instalments called in on loans previously authorized. It is observable that while the revenue from regular sources increased for the six months near $8,000,000, there was less borrowed by $2,045,550. In the last month of 1846 the present tariff was in operation, but it will be observed that the revenues from that resource exceed those of last year by the important figure of 80 per cent. It will also be observed that in the same period the expenditure of the Treasury has been diminished by $3,000,000, of which $2,500,000 was on account of the army proper. This increase of regular revenue, and diminution of expense, made a difference of near $11,000,000 in the amount of the loans. The estimate of the Secretary, in his annual report, for the revenues and expenses of the fiscal year 1848, was as follows:

	1st quarter Actual.	3rd quarter Estimates.	Total.
Customs - - - - - -	11,106,257,41	19,893,742,59	31,000,000
Lands - - - - - -	896,893,47	2,603,116,53	3,500,000
Miscellaneous - - -	58,533,47	341,466,53	400,000
Total	12,061,684.35	22,838,325,65	34,900,000

Of this $19,893,742,59 estimated for three quarters, $5,337,874 was received in the December quarter, and is probably the largest collection ever made in that quarter, it leaves $14,555,868 to be collected in the remaining six months. The collections for the corresponding period of 1847 were from customs $13,365,000, but as we have seen above the collection for the first five weeks of those six months exceed those of last year 80 per cent., should this proportion hold, the customs for the fiscal year 1848 will be $40,000,000, and the whole revenue will exceed the estimates by near $10,000,000, so flourishing are the sources whence the Treasury derives its means.

The debt of the Federal Government on the 1st December, 1847, amounted to $45,659,659, of which about $14,000,000 was afloat as Treasury Notes, but convertible into stock, having 20 years to run, at the pleasure of the holder. The whole amount of debts authorised under existing loans $53,268,118, and the bill before Congress for $16,000,000, *in addition*, will raise the amount in round numbers $70,000,000. This would appear to be a large debt, and calculated to produce uneasiness in relation to its effects upon the markets and upon the revenue of the government, more particularly that it bears $4,200,000 of annual interest, more than equal to the revenue of the public lands, which are pledged for the redemption of the debt. The amount of debt which the market can bear, depends to a considerable extent upon circumstances. The debt, as we have stated, is now over forty-five millions, and yet in the midst of an intense money pressure its price keeps at par in New York. There is an element at work, however, which will create a demand for a much larger quantity of national stock than the amount here put down. We allude to the progress of what is called at the north "free" or stock banking. In the State of New York there are two systems of banking, the old chartered, the creation of which is prohibited by the constitution, and the "free banks." The former issue $19,000,000 of circulation not secured, and the latter secured on mortgage, United States stocks and $8,000,000 of New York State stocks. The charters of the old banks, most of them, expire in a few years, and they can continue business only by pledging stock for their notes. The debt of New York amounting only to $18,000,000, however, under the new constitution is to be paid off in a few years, $4,000,000 is to be paid this year, and as the free banks already hold $8,000,000, there will remain but $6,000,000 for banking purposes, and the amount will decrease annually by payments. Under this system New York alone will, in a few years, require $30,000,000 of United States stocks for banking purposes. This system has also become popular in all the States, and as the severe lessons of the past are rapidly losing their influence upon the public mind amid returning prosperity and swelling resources. The bank mania is rapidly increasing, Pennsylvania, New Jersey and Tennessee, are discussing loans similar to that of New York, in order to restrain and guide the disposition to create banks. In Pennsylvania there are applications before the Legislature for $5,000,000 of new bank capital, but little of this will be granted, because the governor and democratic party are opposed to charters, without the individual liability clause, many bills that have passed have been returned on that ground. Should the stock system be introduced, a large demand for stock will be created. New Jersey has no stock of its own, and must take United States stock; Tennessee has a debt of some $7,000,000, but it is so "placed" that it could not be readily available for banks. The same object is being pursued in other States, and a demand for, at least, $100,000,000 of stocks will grow out of this system, which for good or for evil is spreading. It is obvious that when a State, like New York for instance, draws its own stock out of the market into the hands of the State Comptroller, as security for bank notes, it leaves room for United States stocks, and this has been one cause of the firmness of the stock market. We have said that the New York free banks have bought $8 000.000 of New York stocks and issued an equal amount of paper to circulate as money. As long as that paper is convertible and equal to specie, its effect upon business is the same, swelling the volume of the circulating medium. The operation is, therefore, in its influence upon the money market temptingly the same, as if the stock had been sold abroad, and specie returned and poured into the channels of circulation. As this operation spreads, as well in New York as in other States, the usual symptoms of an enhanced circulation will be manifest in growing trade and rising prices, increased imports of goods, large government revenues, followed by an export of the precious metals. The increase of the paper money of the country has been accompanied by a large addition to the specie circulation, apparent in the report of the director of the mint on its operations.

GOLD AND SILVER DEPOSITES OF THE SEVERAL MINTS AND ANNUAL COINAGE.

	DEPOSITES FOR COINAGE.		COINAGE.			
	Gold.	Silver.	Copper.	Silver.	Gold.	Total.
1845	$3,724,106	1,873,486	38,948	1,873,200	3,756,447	5,658,595
1846	4,129,597	6,708,363	41,215	2,558,580	4,034,177	6,633,965
1847	$20,619,544	2,450,059	61,827	2,374,450	20,221,385	22,657,662

The addition to the actual currency of the country has been, it appears, near $23,000,000 of actual coin, of which $7,739,506 was coined in New Orleans. This aggregate has suffered no diminution by reason of the exports that have taken place since November. About $8,000,000 have been exported under the kiting operations of the London houses, to which we have alluded in the fore-part of this article. These exports have been composed almost exclusively of English soverigns, obtained from banks, because they alone were available abroad as money immediately on their arrival. The amount coined at the several mints has been as follows:

UNITED STATES COINAGE.

	1844.	1845.	1846.	1847.
Philadelphia - -	$2,843,457	3,416,800	3,623,443	14,348,366
New Orleans - -	4,208,500	1,750,000	2,483,800	7,469,000
Dahlonega - -	488,600	501,795	449,727	371,485
Charlotte - - -	147,210	------	76,995	478,820
	$7,687,767	5,668,595	6,633,443	22,657,671

This large increase of the coined money of the country is an addition to its floating capital, and will be returned upon Europe as soon as the bank speculation shall have promoted a consumption of capital beyond production. Instead of remaing in circulation, it will be sent away for goods to be consumed on credit. The whole face of affairs promises a gradual expansion of the currency of the country, probably to be so far supported by the availability of its produce in the foreign market, as to prolong the inevitable revulsion to a period longer than is usually occupied by a commercial speculation.

THE PUBLISHING BUSINESS.

Ollendorff's New Method of Learning to Read, Write and Speak the German Language; to which is added a systematic outline of German Grammar, by G. S. Adler, A. B., Professor of the German Language in the University of New York: 5th edition.

Ollendorff's New Method of Learning to Read, Write and Speak the French Language; with an appendix containing the cardinal and ordinal numbers and full paradigms of the regular and irregular, auxiliary, reflective and impersonal verbs, by J. L. Jewett.

Morceaux Choisis des Auteurs Modernes, a l'usage de la Jeunesse: with a translation of the new and difficult words and idiomatic phrases which occur in the work, by F. M. Rowan. Revised, corrected and enlarged by J. L. Jewett.

Chefs-d'Œuvre Dramatiques de la Langue Francaise, mis en ordre progressif et annote's, pour en faciliter l'intelligence, par A. G. Collot, Professeur de langues et de la literature: published at New York by D. Appleton & Co., 200 Broadway; Philadelphia, G. S. Appleton, 148 Chesnut street.

The acquisition and use of a modern language with ease and facility are so requisite in the extended transactions of modern trade, that it falls within the proper province of a Commercial Review to notice the text book devoted to those objects. We hold that the best way of learning a language is to do it speedily. It may be necessary to gloat over a particle or weigh a quantity for hours in studying the classics which are cultivated for their style rather than their matter. But most assuredly the old method of learning a language, by cramming dry rules that overload the memory, tax the reason and, after all, give no facility and practical control over it with the tongue or the pen, had better be abandoned. The works of no modern grammarian have been so popular with the sect of utilitarians, as those of Ollendorff. His method is briefly thus: we are to speak in the language we are to learn, from the very first, the same words are to be repeated till we know them, then new ones are introduced. And thus by repitition the vocabulary is enlarged; then the sentences are so framed that the learner makes the acquaintance, and the familiar acquaintance, too, of all the families of idioms, every inflection and form of expression is repeated till well known, and then the difficulties are mastered. The language and its grammar have been learned, almost unconsciously, and much in the same way as a child learns to talk. The German Grammar contains 102 lessons and 246 exercises; the French 86 lessons and 249 exercises. Suppose a person who was acquainted with the pronunciation of these languages should take up either of these volumes; at the rate of one lesson a day and about three exercises, the book would be finished in less than four months. And this would have been accomplished without any of the wearisomeness generally attendant on the study of language. The Messrs. Appleton in publishing these works, have conferred a great favor on those who desire to make themselves masters of French and German, and we hope they will appreciate the advantages to be gained from the very clear and natural method therein unfolded. The German Grammar, in addition to the original matter of Ollendorff, contains a capital synthetic view of the language, compiled from the works of Becker and Heyne by Professor Adler. The two *French Readers* are also very valuable to students of that language.

In the one, the modern French writers, Victor Hugo, Sue, Thierry, Thiers, Lamartine and others are introduced, so that a familiarity is gained with the peculiar terms and the many new words of the rich harvest in the literature of France subsequent to the revolution and empire. The Second Reader is composed of the finest plays of the French stage, rather, however, intended to familiarize a student with their style, than in any respect to furnish more than a specimen of the unequalled fertility and genius of the French dramatic writers. All of the above books can be procured at J. B. Steel's, Camp street.

The Past, the Present and the Future, by H. C. Cary, author of "Principles of Political Economy." Philadelphia: Carey & Hart; New Orleans, J. B. Steel, 1848.

It is with no ordinary feelings that we have perused this work, so full of philanthropy and hope. What a pleasure even in the romance of a philosopher to imagine a community living in the practice of the beautiful doctrine of the author of Christianity, "to do to others as we would that they should do to us!" But when the theories of political economy are regarded to be false, just so far as they lead us to transgress the same divine precepts, when national success is shown to involve the practical but almost unseen operation of it, we are induced to treat the advocate of such views with more than the tolerance accorded to one who pleases, with the respect due to one who instructs. Mr Carey's conclusions as to certain popular theories in political economy, have doubtless been influenced by the great discoveries of latter years in agricultural chemistry, that infant science which in its infancy guided by the great genius of such as Liebig and Muller, and the practical spirit of the age, promises such great things for the progress of civilization and the happiness of mankind. It is impossible in a notice like the present, to do more than express the warmth of our emotion, to attempt within such narrow limits to give a summary of the volume, would be ridiculous; but we hope to give, in an early number, a review of the leading doctrines of this book. This we can safely say, that it sustains the high reputation of its author as an accurate and original thinker and most amiable and benevolent man.

Edinburgh Review, October 1847, *Blackwood's Magazine, November, and the North British Review, November*. 1847. New York: Leonard Scott, 79 Fulton street.

These valuable periodicals are justly entitled even in this age of reading to more than a mere cursory glance. For it is not alone the great amount of diversified knowledge that they contain which gives them a value; but they present us with the very form the present times, the feelings and the anticipations of the best thinkers of the day. The amount of labor and research bestowed on the articles of the two reviews is extraordinary, and Blackwood bating his strong toryism and rampant anti-Americanism is as fresh as in his joyous youth.

Essays on the Improvement of Public Waters in the city of New Orleans.—The authors of this pamphlet, Messrs. Maurras and Porre have favored us with copies in French and English. We have marked some passages for insertion in the Review and discovered interesting matter upon every page. We hope to Review the subject in our next number.

Southern Literary Messenger, January, 1848. *Richmond, Va.*—The fine fancy and heartfulness of Southern literature are distinctly marked in the messenger. It is a matter of high congratulation that if the minds of Southerners have been more distinguished for the spontaneous efforts of eloquence in the legislative halls of the nation, than by the slow and closeted labors of the pen, at all events whatever has been done has shown a love of art and beauty for its own sake and a worship of truth and poetry as their own "exceeding great reward." One touching poem to the memory of Richard Henry Wilde is conceived in a spirit of proper respect to the honored dead. The proceedings of the Virginia Historical Society under its new organization and an address by the Hon. W. C. Rives, encourage the hope that such societies will as they ought flourish in a land hallowed by memories of our Revolution.

A System of English Versification; illustrated by numerous examples from the bests poets, by Erastus Everett, A. M. New York: Appleton & Co., 1848.

This work claims a Louisiana paternity and being of the classic order may almost be regarded among the first fruits of the state. It is gratifying to welcome such exertions of our citizens and to indulge the hope that they will hereafter be more frequent. Surely literature is to have a place among us in reality, when an university shall rear its head in New Orleans. We regret our inability to do more than give a meegre notice of Mr. Everett's interesting work.

Life of General William Hull, by his Daughter Mrs. Campbell. New York: Appleton & Co., 1848. New Orleans: J. B. Steel.

"Strike but hear me," is an exclamation which the author of these memoirs may be supposed to have had in memory. Let us at least be governed by the gentler alternative when a daughter in filial affection, defends the name and reputation of her father. Whatever our sentiments we cannot but feel something of the admiration elicited by that Roman woman, who we are told nourished from her own bosom the sire that power had decreed to die. Let it be so, and as General Hull was not unknown to fame in the times that tried men's souls," so let an ear be lent to her who professes nothing to extenuate, nor set down aught in malice, as she would not in this pious task.

Editor's Note.—We have on hand several valuable papers which shall appear in due season, acknowledgments are made to Senators Calhoun, Johnson and Downs; and Morse and La Sere of the House for valuable public documents; also, to Professor Bache of the Coast Survey.

THE
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ART. 1.—NORTHERN ARKANSAS AND ITS NATURAL ADVANTAGES.

No part of the United States—climate, soil, and the facilities of getting the products of the earth to market considered—affords so many inducements for the poor man, or one with moderate means, as the northern portion of Arkansas. In using the word northern, I design it in contra-distinction from the southern portion, which is better suited for cotton planters and men of great means. A careful survey of the map will at once demonstrate how abundantly it is supplied with lines of small streams; the river navigable for boats, the small streams capable of driving any kind of machinery.

The great river of northern Arkansas is White river, and when I venture the assertion that it is naturally a better river for navigation than the Ohio, my readers will doubtless at the first blush note me beside myself. But I will prove my assertion without even disparaging the Ohio, or quoting the eccentric and gified orator of Roanoke, who declared it "dry one half the year and frozen the other."

It is a notorious fact, that for some months in every year boats of even two feet draught find much difficulty in going from Cairo to Louisville. White river, from its mouth to the junction of Black river with it, a distance of three hundred and fifty miles, never has less than three feet of water, and but one bar on which the water gets that low, and for many saasons affords four feet the year round. The Ohio has the advantage of having had thousands appropriated upon it, and the removal of many snags. White river rolls on in silent majesty, just as God made it, the hand of man never yet having done the first thing for it; not one dollar has been spent upon it.

Of its tributaries Black river is the most important, watering the counties of Independence, Jackson, Lowena and Randolph. It is navigable for steamboats nine months in the year to Pocahontas, the county seat of Randolph, a distance of some one hundred miles, and the expenditure of a few thousand dollars would make it navigable the entire year. Little Red river waters the counties of Van Buren and White, and is navigable for steamboats some miles above its mouth. One of its branches is somewhat noted, being the one on which the Whetstone and Cole families reside, and having the soubriquet of the "Devil's Fork." Currant river waters Randolph, and empties into Black, it is navigable for flatboats, as are Spring river and Eleven Points, both emptying into Black.

Steamboats drawing three feet water could ascend White river as far up as Batesville, a distance of four hundred miles from its mouth, every day in the year, were $20,000 judiciously expended upon its improvement, and I am pleased to state that the people interested are becoming aroused to the importance of this work. A recent internal improvement convention, holden at Batesville, took important steps to awake public attention to its vast importance. Ceasing to call on Hercules, to hope for aid from the General Government, the people are going to put their own shoulders to the wheel. That beautiful nest egg, the bequest to us from the Congress of 1841, in the shape of the five hundred thousand acres donation, will give us a fair start, and then individual enterprise and individual aid will do the rest. Above Batesville for more than one hundred and fifty miles, there is flatboat navigation, and with money good steamboat navigation may be had. Our climate is mild; ice is never with us an obstruction to navigation. Our market is New Orleans, and when we have water we can leave.

Our soil is of every description; the bottom lands of our river are of the very richest character, yielding from fifty to eighty bushels of corn to the acre. Cotton grows well: in Jackson, Monroe, St. Francis, and all the northeastern counties, the yield is from one thousand to two thousand pounds to the acre. Independence, Lowena, Randolph, and Van Buren, grow wheat well; all the western counties are well adapted to all kinds of small grain. In most of the counties tobacco does well. It is a fine country for stock; horses, mules and hogs can be raised in any numbers and with as little cost as in any part of the United States of the same latitude.

The swamps and lowlands of Jackson, St. Francis and other counties, have a never failing supply of ash and cypress, and immense rafts are taken to New Orleans annually. White river, above Batesville, abounds with forests of pine, and any quantity of lumber can be procured.

The reader may ask why it is that such a country, possessing such advantages has been overlooked? When the nature of the American people is changed, I may possibly be enabled to answer. Restlessness is a predominant trait in our character,—a disposition to be ever going towards the setting sun. Men start to move, and for fear there is a better place just beyond them, are never satisfied until their means of travelling are exhausted, or they are brought to a stand by the Rocky mountains or the Pacific ocean.

The town of Batesville is one hundred and twenty miles from Memphis; of that distance about ninety miles is as level as any street in New Orleans, the road passing through the best of timber. A railroad would be made in yankee land through it in less time than you could say "Jack Robinson." The *progressive developments* of the age may do something towards it, but I fear it will be a long time first. I may as well mention the fact, that about equi-distant from Memphis and this place, but far to the right of the road, herds of buffaloes are still to be found. Every season several are killed; the lakes and swamps are impassable for men and horses, and the buffaloes are there in a great measure protected. We have generally much game in this region, though at this time, from unknown causes, it is scarce. Our rivers abound in delightful fish,—trout that would even make "York's tall son's" mouth to water. N., OF ARKANSAS.

Art. II.—ESSAY WRITING, AND THE PRESS.

Quidquid præcipies; esto brevis: ut cito dicta
Percipiant animi dociles, teneantque fideles.—HOR.

IT is surprising how many books there are in the literature of every country, which are absolutely worthless, and how much unnecessary repetition and amplification there is in the *best* books in every language. Could the ideas worth preservation in the literature of any particular people, be separated from the unprofitable and useless weight of words in which they are generally clothed; it would astonish any one to see into what a small compass these ideas could be compressed. Under this process ponderous folios would sink into quartos, quartos into octavos, and the huge Bodleian could be accomodated in our modest studio. The "Excursion," we would make with Wordsworth's philosophic pedlar, would be much shorter, and the "Fairie Queene" would appear much more sylph-like in her proportions, growing "fine by degrees and beautifully less." We are among those who subscribe to the sentiment of the Grecian aphorism, "mega biblion, mega kakon," and have always had a horror for one, which is too large to be swallowed, or to lounge with upon a sofa, but requires to be laid in state upon your desk and carefully chewed and digested. Reading is with us a recreation and not a labor after learning, and the majority of mankind agree with us upon this point. Lord Bacon observes in one of his Essays that "Studies serve for delight, for ornament, and for ability." The mass of readers are among that class, both from inclination and from necessity, whose studies are "for delight." The world and its business, claims their time and energies, and when permitted to escape into the world of books, it is to read and enjoy, not to dispute or criticise, to pass a pleasant hour, and not to gather together materials for a book. The hewers of wood and drawers of water, who constitute a vast majority of the human race, can not afford to neglect the serious work of earning bread, to read such books as Narre's Memoirs of William Cecil, or Clarendon's History of the Rebellion. Lord Bacon; himself, is known to thousands, through his Essays, who have never dared to disturb the learned dust of the Novum Organum or De Augmentis Scientia, Utility, Progress and Fruit, together with inductive philosophy, these terms are familiarly associated in their minds with his name, but they gather their ideas of Bacon and his philosophy from reviews and biographies, like that of Basil Montague, and not from a perusal of his works, themselves, as we form our opinions of foreign countries *from the reports* of travelers who have visited them. They content themselves with the Essays, wisely determining that he who can utter such sage precepts upon the most dissimilar subjects, upon Usury, upon Judicature, upon Studies, upon Gardening, upon Negotiating, would deal with equal cleverness with the Stagerite and Thomas Aquinas. Knowledge for the masses must be conveyed in as small a compass, and in a form as attractive as possible.

It is the boast of our age to have provided this knowledge for the people. Its most prominent feature, with all its material, activity, if we may use the expression, is the general diffusion of knowledge among the masses. Observe the character of the literature of England, the most enlightened nation on the globe. Its publications are not now immense folios, destined to grace the shelves of the scholar, alone, or falling still-born from the press. Periodical Literature monopolizes the talent of the land. Not that England has lost its scholars; for never has true, discriminating, philosophical and manly criticism been carried to greater perfection than by them of late years; but they feel the impetus and partake of the spirit of the age. The days of patronage from the great and wealthy are passed, and the mass is the Macænas of the age. Authors are obliged to court the popular favor, by following the popular taste. The consequence is that the Press teems with light social novels; the land is crowded with reviews, annuals and newspapers. Amidst this popular literature, the prevailing feature is its fitness for informing the common mind, and in effecting this object we give the greatest weight and importance to the Essays which constitute the gems of the reviews. To illustrate our idea, we think the influence of such works as Charles O'Malley, or Dombey & Son, on public morals or taste, weak and insignificant, compared to that exerted by the classical, chaste and powerful Essays of Macauley, Wilson, or Sidney Smith. Such writings as the latter, are suited to the wants of the people, conveying as much instructive matter as Compends and Encyclopædias, and rendered interesting and entertaining by the graces of rhetoric and the charms of scholarship. They are not text books for scholars, but agreeable companions for every one. Essayists have not built up a royal road to learning, but have decked the toilsome ascent with green borders and cooling shades. But a few individuals of the whole human race, may ever stand upon the highest summit of knowledge, yet tens of thousands may wander amidst the brilliant parterres of Periodical Literature which ornament the way-side, and pluck sweet flowers, lulled by falling waters and the hum of bees.

It is not only necessary that a people should have a literature, but that it should be adapted to their wants and capacities. No one can wonder at the faint glimmering of light—the crepusculum—in which Europe groped, even after the invention of Printing; who observes the issues of the press of those days, consisting of the labored, unprofitable disquisitions of the schoolmen, "cimini sectores," or the equally labored and more furious disputations of polemical divines. If intelligent people of the present day, neglect such works as Burton's Anatomy of Melancholy, or Adam Smith's Wealth of Nations, for lighter reading, we must conclude that these issues of the press could have found few readers among the boors and villeins of Germany. Dr. Johnson once said, with his absurd dogmatism, that Demosthenes spoke to a nation of barbarians, that "the mass of every people must be barbarians, where there is no printing." But we say that there may be printing and no intelligence, and on the other hand, the highest degree of intelligence where a type was never seen. As an illustration of this idea, we assert that the people of England, during the reign of Elizabeth, were more barbarous and ignorant than those of Athens in the time of Thucydides. Johnson's remark was applied to Athens, particularly. "The sage," as Boswell delights to term him, had never, certainly, considered the peculiar constitution of society and of government in that city. Let us, therefore, in order to disprove his assertion and establish our own, transfer ourselves in imagination, to the favored seat of Minerva, and follow a citizen of that period through the occupations and amusements of a single day. The sun has just arisen, when he leaves his couch, to repair to the large semi-circular and unroofed house, which is denominated the Theatre. Here he listens to the sublime choruses of Æschylus; the more tender and touching plays of his youthful rival, Sophocles, or the amusing and instructive pleasantries of Aristophanes. He departs from the Theatre and strolls along the streets, reading the inscriptions upon the little columns, at their corners, which record the aphorisms of the sages of his country, or the services rendered by distinguished individuals to the commonwealth. He stops to gaze upon one of those beautiful porticos, with which Pericles had embellished the city and upon whose entablature and friezes, he recognises the master hand of Pracitelles or Phidias. He enters one of them and contemplates, in admiration, the triumphs of the pencil of Xeuxis or Apelles. He issues again into the street and finds himself in the midst of a crowd who are listening to a strolling singer reciting the parting of Hector and Adromache. He escapes and approaches another collection of citizens, most of whom are young men, who are amusing themselves with a grotesque figure, in their midst, who bears in his hand a lighted lamp, and replies to the gay sallies of the crowd, only with looks of supreme contempt. He departs from the city by the northern gate, and seeks the plane trees of the Academy, and there listens, in mute delight, as Plato discourses to his throng of disciples. He returns and enters the Assembly, where orators are striving for the popular favor, and are applauded or hooted, according as they speak, well or ill, for each man is a critic, who in his youth listened to Pericles, who is in the daily habit of hearing Alcibiades and attending the lectures of Isocrates. He wanders to the Pireus and mingles with the crowd of merchants, whose conversation is of foreign lands and their productions, of tariffs, and loss and gain. He retires to Mount Hymetus, to enjoy the cool breeze of evening, and watch the little groups which lie along the banks of the meandering Ilyssus, discussing Thucydides' recent history of the Peloponesian war, or comparing the merits of the philosophy of Zeno and Aristippus, or perhaps, recalling some expression of Plato. some jest of Alcibiades. or extravagance of Diogenes. At last he ends the day reclining at the table of some friend. the delicacies of whose board might tempt the appetite of Apicius: and the mysteries of his cuisine. the admiration of a Vattel. Thus have we traced our Athenian through the occupations of a single day. Perhaps, on the morrow, he may ascend to the Parthenon, rich in painting and statuary, which could shame the collections of the Louvre or the Vatican; in whose midst rose the statue of Minerva, resplendent in ivory and gold, and cheating the mind of the beholder with the idea that the goddess had descended in "propria persona," to watch over the fortunes of Athens. Or perhaps, he may visit the school of Isocrates, or the Stadium, or the nightly assembly upon the hill of Mars. But follow him where we may, we find no printing presses in Athens. Its inhabitants gathered from observation and oral instruction, knowledge which made them discriminating in taste, profound in reasoning, and susceptible to every thing grand and beautiful. The city was one vast gymnasium, and all its inhabitants pupils. Dr. Johnson saw nothing of Athenian life in London. There were no reciters of verses at the corners of Fleet street, no contests for laurel crowns at Old Drury, no sages instructing the people from day to day, no statuary and paintings, to keep alive the love of the Ideal, to teach to the common people the elements of beauty and the principles of taste. On the contrary he saw that those who could not read, were necessarily ignorant, and hence his remark. That he erred we have seen from the fact that the highest degree of intelligence and refinement prevailed at Athens, hundreds of years before the invention of printing. Years after the period in Grecian history, to which we have referred, when the Romans over-ran Attica, the conquered Athenian gave laws to his conquerors, in matters of taste. Horace, in his second book, thus acknowledges that servile imitation of Grecian models, which is apparent throughout the whole Roman literature:—

"Grecia capta ferum victorem cepit et artes
Intulit agresti Latio;—

Let us look now to the reign of Elizabeth, the Augustan age of English Literature; as an illustration of the truth that printing presses and gross ignorance may be found together, or that a literature may exist without benefit to the mass of a people. There were but few persons, in the reign of this great queen, who could read; and there were but few books to read. The Utopia, the Court of Love, and the Canterbury Tales, in the English, together with the Chronicles of Froissart, and the Pantagruel of Rabelais, in the French, comprised nearly the whole number of books to be found in a private library of that period. Sir Anthony Cook and Ascham, feasted upon the literature of Greece and Rome, whilst English gentlemen, who were not savans, hunted foxes and sat in judgment upon poachers and deer stealers. The Queen, Lady Jane Gray, Lady Burleigh, and the mother of Bacon, enjoyed the advantages of a classical education, but the great majority of the ladies of England, passed an unvaried, monotonous existence in household drudgery, or over pieces of endless embroidery. The great mass of the people were without books, without knowledg from any source. Tis true that the latter part of this reign was rendered illustrious by the rise of the greatest of poets, and first of philosophers. Tis true that Raleigh and Essex murmured love songs into the ears of the maids of honor, who fluttered around Elizabeth,

ı dared to offer their incense of praise to her who sat upon the
as the flattering bard expressed it, "in maiden meditation
e." 'Tis true that during this reign Ben Jonson, Massinger,
d, were writing their plays, but still there was no literature
eople. Bacon was an author for the student. Shakspeare
readers, and the verse of Raleigh and Essex was intended for
dian of St. James. The Romans, in the Augustan age, were
velling, and miserable; the French, in the time of Louis the
ıth, were enslaved, oppressed, and ignorant; and the English,
me of Elizabeth, were miserable, and ignorant. We think we
d enough to prove our assertion, that the people of Athens, in
of Thucydides, were more intelligent than the people of Eng-
ring the reign of Elizabeth; and that the existence of a litera-
ıo evidence, or criterion, of the intelligence of the mass. This
e think, depends entirely upon the *character* of a literature,
upon its extent or intrinsic worth. In the reign of Elizabeth,
ıve remarked, there was no literature for the people, and we
scend through successive reigns, down to that of Queen Anne,
e find our English ancestors in possession of one which reach-
eople. But here a new era in literature commenced. Books
ı written in the preceding reign, and beginning of this, upon
d weighty subjects. Locke had published his Essay upon the
Understanding, Newton his Principia, and Dryden his Virgil;
e were none which spoke familiarly to men, none which entered
ıses, criticised their lives, their morals, their habits, and their
. To the reign of Anne, must we look for the rise of Essay
the fruitful mother of Periodical Literature; the means by
ıe waters of the fabled spring of knowledge were partly divert-
their worn and narrow channels through the cloister of the
ıd the studio of the learned, to water and refresh the earth in
nd streams. The people were supplied with reading matter,
their wants and adapted to their capacities, and it came to them
and refreshing.

> "Quale sopor fessis, in gramine; quale per æstum,
> Dulcis aquæ saliente, sitim restinguere rivo."

change in the character of the literature of England, or rather
ıtion of a new department of literature, we attribute to the rise
y writing, both because it was the foundation and beginning
riodical Literature; and constituted the most popular portion
pular reading of the day.

reign of Queen Anne, the period when this style of writing
e into importance, was remarkable for the liberal patronage
men of letters. We meet, at this period, with a crowd of
who held high and lucrative offices under the government. It
ge of Mæcenases. Bolingbroke, Somers, Halifax, Oxford, and
munificent patrons of literary merit, were each worthy to be
a Horace. In succeeding reigns the patronage of the govern-
ıd of the great, was employed in buying parliamentary influence,
find such men as Johnson, Savage, and Goldsmith, starving in

garrets and cellars, on crusts of bread. But the writers to whom we are about to introduce the reader, were almost without exception, above want. There was Addison; in style severely chaste, and chastely humorous. There was the sprightly, witty and entertaing Steele, in his writings a severe moralist, in his life a bon-vivant. And there were Parnell, Tickell, Bludgell, and Eusden, names of greater or less notoriety, and the associates of Addison and Steele, in many of their literary efforts. These writers, (exceptions to authors in this respect.) were independent, and passed their mornings in study, their evenings in society, and their nights at Button's coffee house. It is hinted that Addison and Steele kept late hours, at taverns, to escape from their uncongenial better halves. A common occurrence this is, for men of mind and sensibility to lavish their wealth of affection upon women, who can neither appreciate their intellect or love. And here occurs to our mind, a passage in the "Life and Opinions of Tristam Shandy," which may show the relative positions of literary husband, and foolish wife, and the character of their intercourse. This same passage has often consoled us in our bachelor existence, by giving us an insight into some portions of the domestic economy. Tristam's father, it seems, had been endeavoring to convince his lady, of the propriety of employing Dr. Slop, instead of the old woman, in a very interesting crisis, fast approaching. He failed to effect his purpose; because he could not make her comprehend the drift of his argument, "Cursed luck! said he to himself one afternoon, as he walked out of the room, after he had been stating it for an hour and half to her, to no manner of purpose; cursed luck! said he biting his lip as he shut the door—for a man to be master of one of the finest chains of reasoning in nature, and have a wife, at the same time, with such a head-piece, that he cannot hang up a single inference within side of it, to save his soul from destruction!" This by way of episode. Whatever were the domestic relations of Addison and Steele, we are only viewing them now as the sprightly fathers of English Essay writing. Contemporaneous names, greater than these, may be mentioned. He, for instance, who pined in his Grotto at Twickenham, over his unrequited love for Mary Wortley Montague, and immortalized an hundred fools in his Dunciad. But these were the principal contributors to the Spectator, the Tatler, and the Guardian—these were the first to introduce a style of writing which carried books to the fire-sides of the people. The first of these, the Tatler, was commenced by Steele, and received occasional contributions from Addison. Refering to the superiority of the papers furnished by the latter, Sir Richard remarked, that "he himself fared like a distressed Prince who called a powerful neighbor to his aid, and was undone by his auxiliary."

Posterity has objected to this too modest estimate of his own powers. Samuel T. Coleridge used always to give the preference to those essays of the Tatler, contributed by Steele. The Tatler was followed by the Spectator, the Guardian, and a number of minor enterprises. The tone of morality which pervaded these works, their sharp satire against the follies of the age, their wit and humor, their extreme elegance of style, together with a firm advocacy of liberal whig principles, secured to them a wide-spread popularity. They were issued ad placed in the hands of thousands, who, but for the cheap ı which they appeared, and the familiar style in which they ritten, would never have read them. That they reached all of society, is proven by the lines addressed "To the author of ectator" by Tickell,

"Thy works in Chloe's toilet gain a part,
And with his tailor share the foplings heart,"

r effect upon society was most salutary; as, for instance, in im- the style and character of theatrical representations. Dra- depending upon popular favor, generally adopt the prevalent f morality, sanctioned by contemporaneous public opinion. In ie of Queen Anne, the most unbridled licentiousness was allow- lays, and this reacted upon society through the representations stage, rendering that corrupt public sentiment, which tolerated manded it, more corrupt and licentious. A Jane Shore, a Miss a Mrs. Frail, a George Dandin, (that humorous creation of e in the guise of a country John Bull,) uttering what he thinks ıinst cuckolds, whilst his spouse is lying in the meretricious es of a young gallant or father-confessor; a hypocritical or us churchman, an amiable spendthrift, a sentimental scoundrel; ere the characters which delighted the elite of old Drury and reat unsoaped" in its pit. Beaumont and Fletcher were pre- o Shakespeare; Rowe, Congreve and Wycherly to Ben John- assinger and Ford. In scenic arrangements, we learn some- f their extravagances, from the third book of the Dunciad:

"All sudden gorgons hiss and dragons glare
And ten horned fiends and giants rush to war;
Hell rises, heaven descends and dance on earth,
Gods, imps and monsters, music, rage and mirth.
A fire, a jig, a battle and a ball,
Till one wide conflagration swallows all."

were the representations of the theatre, faulty in taste and ess in licentiousness. No one could contend that at this period a school of morals, or even a decent cart upon which to ride . The Spectator strove to prevent the injurious consequences ıg to society from this cause, by correcting the representations stage. By his merciless ridicule of the "stage tricks" of the d by his just views upon the true and legitimate drama, as a of morals, he sought to banish from the stage whatever was nable in taste or sentiment, and he partially succeeded. This e of the many evils which these publications were instrumental ving from society.

the importance of the literary efforts of the Essayists of the f Anne, is to be estimated as much by the *taste* which they for this particular style of writing as by the immediate effects oduced upon society. They gave to the people reading matter uited them, and supplied their wants, and thus did they create sity for a Popular Literature. The consequence is, that they ad many and able followers, and their productions constitute the most agreeable and entertaining portion of English literature. Johnson, Goldsmith, Mackenzie, Mackintosh, Scott and a host of others, have successfully cultivated this species of composition: and at the present time, the brightest ornaments of England's literature, are her Essayists. But amid all the Essayists which she has ever produced, we unhesitatingly acknowledge our preference for the tender-hearted Charles—the pensive Elia. No one can love his writings without loving him; for no writer has made himself to appear so conspicuous, and yet, withal, so amiable, in all he wrote. He never incurred the charge of self-conceit, or wounded the vanity of his readers, by making himself thus prominent, because in every thing he did, there was a simplicity, an address and quaintness of character, as pleasant and entertaining, as the quaintness of style in which he told it. No author, with the exception of Dr. Johnson, is better known to the public than Charles Lamb. The public was the confidant of his joys, his sorrows, his sympathies and his antipathies; his aversion to his duties at the East India House, and his fondness for roast pig. His drinkings with Jem White, his long conversations at the "Cat and Salutation," with Coleridge, his fondness for London, its noises and its old book-stalls, his idolatry of his sister Mary, and (that beautiful and touching episode in his monotonous existence) his unrequited love for Alice W. All these things he has made known to the public. The carelessness with which he wrote, his utter neglect of the limae labor, are to us attractions, instead of defects. It seems as if he had, scratched down his thoughts as they occurred, in the words which first presented themselves, and thus furnished us with a fair transcript of his mind. This gives them as striking an individuality among Essays, as their author enjoyed among his associates. No one could mistake them for the Essays of any but Elia, and no one could mistake Lamb for any other than the veritable Elia. But we do not intend to trouble the reader with portraits of the modern British Essayists. So numerous are they, that to describe the peculiarities of style among them, would require much more space than we have to spare. Even among the intimate associates of Lamb, besides others great in other departments of literature, we find Hazlitt, Hunt and Hood. All of them popular Essayists, but differing materially from each other in every thing save their radical political principles. Our only object in these desultory rambling remarks, upon Essayists and Essay writing, is to call attention to the importance of this species of literature, and the necessity of supporting our Reviews—its only vehicles in this country.

In this as in every other department of literature, we boast but few publications. A few papers from Franklin, Irving and Legare, together with occasional contributions from different writers, scattered throughout our periodicals, are almost all that are worthy of the name. We find in an old number of the Edinburgh Review, the following paragraph, in in an article by a writer who was a liberal politician and a friend to American institutions. "Literature the Americans have none—no native literature we mean. It is all imported. They had a Franklin indeed; and may afford to live for half a century on his fame. There is, or was, a Mr. Dwight, who wrote some poems, and his baptismal

ne was Timothy. There is a small account of Virginia by Jeffer-
ı, and an epic by Joel Barlow, and some pieces of pleasantry by
. Irving." Now, though these remarks betray the ignorance as
ll as the sneering jealousy of the Englishman, yet it is true that the
rances of America in literature do not keep pace with her social
l political progress. Could Lord Bacon live again, he would find
our people an illustration of the practical working of his teachings;
we consult utility in all we do. And some have imagined that
s prevented the growth of a literature among us. This idea is
newhat similar to the one entertained by some, that in the progress
true religion and accurate knowledge, the cultivation of the poetic
ulty must necessarily decay. They grieve over the divorce of
agination and religion. They mourn over exploded Polytheism.
ey would still delight to paint the nods of the Thunderer—the
rses of Mars—the caduceus and talavia of Mercury, and the cestus
Venus.

They cannot comprehend the poetry which exists in the idea of a
ire essence like the God of the christian, in whose contemplation,
agination, instead of picturing the beauty of a feature, must soar
d soar forever, to measure the glory of an attribute They worship
e poetical mythology of Greece, with its deep allegories, its beautiful
d sensual fictions. They would people our woods again with
ryades, our fountains with Naaids, and bring back the Nereides to
r lakes and rivers. They would give voices to streams and winds,
d loves to the bright tribes of Flora. As far as regards this anima-
on of insensible objects in Heathen Mythology, as a source of poetry,
e would simply say, that the voices of Nature are as many and as
dible now as ever. Still, as of old, day unto day uttereth speech,
d night unto night showeth knowledge; though this must ever be
inarticulate speech, a silent language; which, unheard by the ear,
apprehended by the heart. And though Mythology and Polytheism
ve ceased to furnish their material, yet imagination will always have
s proper exercise, and poetry will always exist, for deep in the heart
man lies the source and sanctuary of poetry, and there it will re-
ain, though the stammering tongue refuse to syllable it in words, till
ature is no more, or the beating heart is stilled in death. To those
whom the gift of song is granted, the expression of this poetry of
e heart, in verse, is natural, necessary and unavoidable. This idea
beautifully expressed by De La Martine, (a French poet of our own
imes,) in the following lines:

"Mais pourquoi chantais—tu? Demande a Philomele
Pourquoi, durant les nuits, sa douce voix se mele
Au doux bruit des misseaux sous l'ombrage voulant
Ie chantais, mescamis, comme l'homme respire
Comme l'oissau qemit, comme levent soupire
Comme l'eau murmure en coulant."

The idea that the progress of knowledge will ever confine the vagaries of fancy and imagination, or rob poetry of its proper and legitimate subjects is absurd. Equally absurd is the idea, that the utilitarian spirit of the age will prevent or greatly retard the growth of a literature among us. It may, we admit, materially change the character of our future publications, rendering them more practical, more useful, and more instructive. It may oblige our poets to follow Wordsworth, in choosing their subjects from the common, every-day objects around us, and to supply their poetic diction with words to characterize a locomotive and a steam-press. Our prose writers may be compelled to dwell in practical teachings, and not in abstract speculations. Our writers of fiction may be driven from the beaten path of the old romance, to seek for objects of compassion among the oppressed mass, the tenants of work-houses and prisons; and to excite our interest in the amelioration of the condition of our race, in the improvement of prison discipline, of criminal codes, and systems of taxation. They may be compelled to recount the real ills of men, and not fictitious misery or sentimental woe. Their heroes must not lisp love-songs or indite sonnets upon their lady-love's eye-brows, or die of ennui or "feelings dull decay;" but they must be serious, earnest men in the vanguard of progress,—they must rage with want or madden under oppression—their life must be a serious work—their love an every-day stimulant to exertion—an ever-active principle of good.

This change in the character of our literature may be required by the spirit of the age, but so far from deploring it, we should view it as the dawn of that day, when literature should fulfil its proper offices, when the press should cease to send forth its bitter or poisonous waters, but should be a fountain of sweet waters, sending forth pure and invigorating streams, to assuage the thirst and heal the maladies of the nations.

The reason of the want of a literature among us, is, we think, correctly accounted for by the writer in the Edinburgh Review, to whom we have before referred. In the paragraph immediately succeeding the one we have quoted, he continues: "But why should the Americans write books, when a six weeks passage brings them in their own tongue, our sense, genius, and science in bales and hogsheads. Prairies, steam boats and grist mills, are their natural objects for centuries to come. Then, when they have got to the Pacific Ocean, epic poems, plays, pleasures of memory, and all the elegant gratifications of an ancient people, who have tamed the wild earth and set down to amuse themselves. This is the natural march of human affairs." Here, we think, are the true reasons for the meagre number of our native productions of merit. Every thing around us—the youth of our country—its vast resources—its unparalleled facilities for commerce—its vast unappropriated territory. Every thing invites to enterpise. The consequence is that no characteristic of the American people, except their tobacco chewing and spitting propensities, appears to the European tourists, so prominent as their absorbing pursuits of gain. We have no gala days, no carnivals, no national festivals, no intervals of leisure and quiet, but we present to the foreigner the spectacle of an entire people, old and young, with restless activity and wasting energy, hastening to get rich. When an inter-national copy-right has been established, so that we can no longer enjoy, so cheaply, the literary productions of Great Britain; when the many avenues to speculation, which we now have shall be closed; when emigration shall cease and our population becomes fixed and settled; when, hoary with age, we can look back upon the picture of our national existence, mellowed and softened by distance and time, then will we have a literature worthy our people and our country. "This is the natural march of human affairs;" but till the period of our youth is passed, our talent and energy will be monopolised in the business of money-making and progress. We, however, must feel surprised that, in the meantime, Essay-writing has not been more cultivated among us. With few literati, we have still more intelligence among our people and more readers, than any other nation upon the globe. And it is strange that this species of literature—which professes to instruct and amuse, without study or fatigue, and which, therefore, so well suits the habits and wants of our people, should not have been more attended to by our literary men.

Political Essay-writing, to which we have had no reference in the preceding remarks, has been more cultivated in this country. The papers of the Federalist contain better and more comprehensive views of the economy and science of Government, than the most labored treatises which have ever been published upon the subject; and ever since the formation of our Government, our political publications have been of the highest order. The whole body of our people are well informed upon political subjects, and require ability in the conduct of our political press. This results from our peculiar form of Government—from the jealousy of the people of the exercise of delegated authority, which causes the investigation and discussion of political questions and the opinions of political aspirants. Besides, we are experimenters in the science of government. We started with the startling paradox, that men were equal and capable of self-government, and we ever sanction the wildest speculations in political science. No censorship confines the freedom of the Press—no errors here are sanctioned by prescription—no such fiction obtains in this country, as that the King can do no wrong—the penalties of a *praemunire* do not affright us—and the consequence is, that every subject and every character is freely canvassed by the Press; controlled alone by an enlightened public opinion.

The vast influence of Political Essayists, may be seen by tracing the progress and fruits of their exertions in the past history of England. About the same time that the Spectator was begun, appeared the Examiner, a paper almost exclusively devoted to politics, and among the first ever established for the advocacy of particular political tenets. It was supported by all the talents of the Tory party. Among its principal contributors, was the witty and dissolute Bolingbroke, and towering above him in intellectual stature and wickedness, that man of God and devil incarnate, the dry, caustic, bitter and sneering Dean of St. Patricks. This paper, though behind the age in many of its views, gave rise to the free discussion of political subjects, for instance, the Treaty of Utrecht and the Hanoverian succession. We view this free discussion of political subjects the great safe-guard of a Republic or Monarchy; and the establishment of such papers as the Examiner an era in the history of England. We have often been amused at an idea, in which Blackstone, the great Commentator, delights, viz: that England, since the Heptarchy, has been free and independent. When he comes to the Norman conquest, he labors hard in the face of all history and the dreadful slaughter of the battle of Hastings, to prove it a misnomer. But if the Saxon nationality was not then lost and the Saxon conquered, we know not what constitutes conquest. Their Kingdom passed to a Foreigner; their language, their judicature, and their manners were changed; and all the offices of trust or emolument, monopolized by the Normans. The historians of England, generally, more moderate than Sir William, date its liberties from the grant of Magna Carta, at Runnymede. Even they are in error; for if we view England hundreds of years after, we find her groaning under the oppression of the Tudors. Henry the Eighth increased ten-fold the prerogatives of the Crown, broke the power of his nobles, (the great conservative influence in a monarchy.) nullified the effect of the Reformation, by making it a subject of legislation and engrossed in his own person, the rights and privileges claimed by the Pope. Throughout the three succeeding reigns, religious intolerance flourished in its malignity, and England presented the strang spectacle of a nation thrice changing its religion with its monarch James the First, the pedant, buffoon and coward, when he came to th throne, granted excessive monopolies, (a custom which the imperiou Elizabeth was obliged by her Parliament to discontinue) prorogue his first Parliament, for refusing to grant supplies without a redres of grievances, and openly proclaimed the divine right of Kings. I the meantime his subjects who adhered to the Church Establishment pursued the non-conforming catholic and dissenting puritan, with th arrogance of power and uncharitable zeal of bigotry. These evils together with the exaction of tonnage, and poundage, and ship-money and the oppressions of the Star-Chamber and Court of High Commission, in the succeeding reign, hastened the crisis, and raised u Pym, Eliot, Hampden and Cromwell, to overturn the throne with it mass of abuses. Here then was religious intolerance—oppressio legalized by corrupt tribunals—direct taxation, and all the evils o unfettered despotic power. We look in vain, for a single element o national liberty, and yet Magna Carta was in existence, and had bee for hundreds of years, and in it, besides many others equally salutary was this provision, that no freeman should be hurt in life or property "nisi per legale judicium parium suorum, aut per lege terrae." Ther is no inherent virtue in parchment constitutions, or declarations o rights. This provision of Magna Carta was as absolute, as at thi day, is the law of tenure by knightly service, with all its incidents o aids, relief, premier seisin, wardship, marriage and escheat. Thi should be well considered by those who think that there is a principl of self-preservation in our constitution, and that we can never be enslaved, because the power of the Executive is accurately defined i that instrument. England is indebted for her freedom, not to empt declarations of abstract principles of right government, but to th blood and toil of the great revolution; and to such papers as th Examiner and Englishman, which keep the people informed upon political subjects, and cause them to watch narrowly every exercise of th prerogative of the Crown.

The power exerted by the political essayists of England at thi lay upon public sentiment, is astonishing. If any step in progress, in advance of the age is to be taken, they are the first to take it. If law reform is necessary to clear the statute book of contradictory, absurd or obsolete statutes,—if a grant is to be made for the support of the Catholic clergy of Ireland—if disabling statutes against non-conformists are to be repealed—if a reformation of the system of representation in the House of Commons is to be effected, or a repeal of the corn laws and adoption of Free Trade principles—the Journalists very often effect these objects by the force of public opinion, which they themselves create and direct. All parties, whether followers of Peel, Russell, or Cobden, appreciate the influence of their political press, and use all their talent and energy to effect their objects through its instrumentality. The Reviews of England, for years past headed by such men as Smith, Brougham, Murry, Constable, Hunt, Wilson, and Lockhart, have been the beacon lights of England, guiding her safe amid the startling political changes and revolutions of Modern Europe. We do not think we attach an undue importance to their influence.

If we wish a still more convincing proof of the power of a political press, we find it in the history of France. There we find pamphleteers as the chief agents in producing a revolution, which agitated Europe. Our revolution was not a violent movement. Our Declaration of Rights was simply declaratory of the principles of Magna Carta. Our people cherished these principles, for which our English ancestors contended at Naseby and Marston Moor; unfettered, too, by the many influences which, in the mother country, modified them or controlled their expression, and when the crisis arrived, the question for them to determine was simply one of expediency, viz: that of dissolving our connexion with the mother country. But in France it was different. The first step towards Republicanism maddened and bewildered the nation. The declaration of the simple and absolute rights of men appeared to the common mind as so many dazzling dogmas. The people were startled by the novelty of truths, which are now the axioms of political science. In a word, France was not prepared for the changes of revolution . and the liberty they obtained, and at whose shrine they worshipped, was not the bright, beautiful, and benign Goddess of our Idolatry, but a horrid caricature—a premature birth—the offspring of Infidelity and Anarchy—bloody and deformed. This hasty denouement of the French Revolution was the work of the Journalists; and its excesses may be attributed to the fact, that the directing spirits of its movements, were theorists, reasoning upon abstract right, influenced with visions of ideal liberty and perfectibility, and counseling changes which the people had not the virtue or intelligence to carry into practical operation. The first blow struck at the Throne, revealed its weakness, and thenceforward it was a work of destruction and not of reformation. Thus did the Encyclopædists produce the great revolution.

If we look now to France, we see its political press exercising a controlling influence upon its destinies. As mighty as it is in England, and as brilliant as is the array of talent which it employs, in France it is a still more powerful agency. The whole talent of the land is employed in its support. Her greatest men of the present day are the offspring of her press, and their transcendant genius has constituted it a fourth estate of the Kingdom. Thiers, Chautaubriand, De La Martine, Cormenin, and Guizot—these are some of those who first appeared before the public as writers for the daily press, and use it now, in the zenith of their glory, as the medium by which they regulate the tactics of parties, and communicate their literary labors to the public. This accounts for the great ability displayed in the political press of France, and for the solidity of much of its social literature.

The population of Paris looks to the issues of its press, in great emergencies, as the heathen did to the revelations of the Delphic Oracle. In 1830, an inflammatory protest from the office of Thiers, called the sections of the city to revolution and bloodshed. Our last advices from the Continent bring us the intelligence, that many papers in the city of Paris have been suppressed by order of Government, because they criticised too severely the conduct of France in regard to the royal marriages of Spain, by which she has violated the Treaty of Utrecht, and her neutral position between Austria and Pius IX. These plain facts demonstrate, better than the most conclusive reasoning, the power and importance of a political press in a land where there are many readers.

A continuation of the liberty we enjoy, must depend upon the enlightment of the people, and an untrammelled press. This idea is trite and common, but let it become singular and familiar only to theorists, and constitutions will never preserve our liberties. It should, therefore, be the duty of every patriot to cherish the liberty of the press—to purify and elevate its tone, so that it may drop the slang, which better suits Grub street or the Pont-neuf, and the hypocritical cant of demagogueism—that it may take enlarged and liberal views of public policy—that it may stand up in defence of religion and morality—and that it may exist to instruct and edify. Let this be effected, and it will be a powerful instrument of good; but let blind party zeal, or a miserable subserviency to party purposes blind its eyes to the truth, or paralyze its strength, and it will be powerful only to do evil—a great Briareus—a pur-blind Argus. May the liberty and independence of the press always be preserved, and in the concluding words of the Irish patriot's address to his constituency, "May the liberties of the people be immortal."

Art. III.—TEXAS SUGAR LANDS, Etc.

The greatly interesting and able discourse of the Hon. P. A. Rost, delivered before the Agricultural and Mechanical Association, in 1845, extracts from which are published in the December (1847) number of the *Commercial Review*, is well calculated for and worthy the perusal of sugar planters, and of all others disposed to cultivate the sugar cane in Texas, as it is full of much valuable information and careful observations. Judge Rost has most likely never visited the neighborhood

ston city, Galveston Bay, and its tributaries. If he had, he
t have fallen into the error in his address that sugar cane
ot ratoon here. The information, it appears, came to the
om a Mr. John C. Marsh, who, as is stated in the article, is
ave planted sugar cane in this neighborhood for five succes-
s, without ever obtaining ratoons.

ve the incorrectness of such a broad assertion, I have only to
t there are now growing at New Washington, Col. Morgan's
n, sugar cane which has ratooned the fourth year. New
ton is at the margin of Galveston Bay. Some four years ago,
of stalks, the third year of their ratooning, were taken to this
exhibited, and were then and there seen by hundreds of liv-
sses. These stalks had matured full seven feet, and were of
height the preceding year, they were what is called "ribbon
d were pronounced by old and experienced planters, equal, if
er than any grown in the United States, and not inferior to
n in the West Indies.

back as 1830 to 1832, the sugar cane was cultivated with
n the Trinity river, by Judge Williams, and the ratoons of
l year were nearly equal to the growth of the first year, and
r therefrom made was equal, if not superior to any ever im-
rom Louisiana, in sweetness, color and grain. The place
is sugar was planted is about twenty miles from Galveston
the Trinity. It is conceded by all impartial men, without any
n, that the lands on the "Caney" are superior to any of the
nds in the Union, and I could name many who are, and have
tivating the cane there on a large scale, with great success and
Amongst the largest planters, I would name Mr. Duncan and
eny, both of these gentlemen are well known to the sugar
and samples of their crops have repeatedly been sent to your
These gentlemen, I have no doubt, would willingly give any
ion to sugar planters as to whether cane will ratoon in that
hood, being only about forty miles from Galveston Island.
mon Barrows, near Cedar Point, on the shore of Galveston
now a fine field planted with cane (ribbon) which has ratooned
al years past, and will vie with any ever planted in Louisiana.
Dunman, near Bolivar Point, has now, and has had for seve-
s past, as fine a field of cane as ever was or may be seen, in
a, and which has for several years back ratooned. Mr. Dun-
sidence is about twenty-five miles from Galveston. Mr.
n, in the neighborhood of Houston, and about twenty-five
m Galveston Bay, has had last year, and a year before last,
ch matured, being then the fifth year of its ratooning, seven
. The facts are here now well established and ascertained,
sugar cane on the prairies, near the bay, furnishes by far more
e matter than the cane on the bottom lands, although not so
t in its growth.

ane of Mr. Sweeny's plantation, on the Bernard river, has
, as I am credibly informed, the sixth year. Mr. Duncan,
plants on the Bernard, has made sugar which was considered

in Galveston by judges, equal to any ever imported from New Orleans, or offered for sale in that market. Colonel Jackson has planted sugar for some three or four years on his plantation, which is at about a distance of from five to six miles from Galveston Bay, and as I am informed, with success, and obtained his seeds for planting from Colonels M. T. Rodgers and Amasa Turner, both of whom had their plantations on Cedar bayou, in the immediate vicinity of the bay. I could and might cite a very large number of other planters in this neighborhood, but believing that the "*facts*" set forth above will satisfactorily prove the incorrectness of Judge Rost's statement concerning the sugar lands of Texas generally, and those of Galveston Bay, and the lands as far south as New Orleans, and its neighborhood, in particular. As to the individual from whom the Judge received his information, and the credibility of the informant, I can say nothing, except that after a diligent inquiry of those residents of the vicinity of Galveston Bay, who have resided here for twenty years or more, I have not found any one who was acquainted with any individual of the name who resided in this part of the country.

It would here not be amiss to mention that any Louisianian who has travelled in midwinter through the prairies of Texas, which the Judge denominates the "naked lands," would not find that he has changed climate, and that he has travelled out of the regions where tropical plants love to grow. The writer of this has yet to learn that in the State of Louisiana tropical plants love to grow in the winter season, they being exposed to those unmitigated furies of northwesters, which the writer has often experienced in Louisiana, but the writer does know, that all southern plants, leaving tropical plants out of the question, cannot grow there unless artificial means are resorted to; and a traveller from New Orleans would only be under the necessity of a one half hour's ride to visit the gardens up and down the river, from Carrolton to the battle-ground, to inquire "for what reason have you Louisianians so many hot houses and hot beds in your gardens?" The answer will be, "Because the frost destroys the southern plants, and they cannot be exposed to the cold weather which we regularly have here every winter." And as every one knows New Orleans and its neighborhood "is not built on naked lands, but on the fertile soil of southern swamps," which luckily for New Orleans, encircles it nearly the whole extent, and prevents the northwesters from striking the tropical plants with their unmitigated fury. The year 1837, I think, gave a good example to Louisiana, that southern plants cannot well prosper there in winter, and every inhabitant will recollect that in that year every orange tree was killed. Now, in such weather, a traveller just from the northern States riding out on the Louisiania prairies would find and certainly say, that he has not come to the Elysean fields of Louisiana, but would believe that he was somewhere near his own home. And I do candidly believe, that the northwesters coming from beyond the Rocky mountains, do not go south in their travel through such a vast country, for the sole purpose of giving to this portion of our Union, Texas, the monopoly of keeping their unmitigated fury within their own State limits, but I must believe that they cross sometimes the boundary line, the river Sabine, and pay some visits of respect, for old acquaintance sake, to our neighbors, the sugar planters of Louisiana.

In conclusion, then, I am bound to state, that the furies of the northwesters are in Texas not looked upon and felt as much as the northeasterly winds, and by a glance at the map it will be seen that they come from "Louisiana," that is to say, a region of our Union "where tropical plants love to grow." H. W. W.

We cannot partake of the temper which is evinced in this thrust at the climate of Louisiana. If Judge Rost was deceived in the information given him of the capacities of the soil of Texas for the culture of sugar, *we know* he was honestly deceived, and after consulting the most reliable sources.

Since receiving the above paper some one has kindly sent us from Texas "*A Statement of the Relative Advantages and Capacities for the Culture of Sugar in Louisiana and Texas.* By a Disinterested and Close Observer." We are delighted to receive and publish it for the valuable matter embraced. It is our desire to do full and ample justice to Texas in every particular, and we invite the cooperation of her citizens.

The writer of the following article proposes to state his views of the climate, seasons, fertility and fitness of soil, product per acre, quality of the sugar, facility of getting fuel, of navigation and market, of supplying a plantation with teams, provisions and lumber, and the relative prices of the land, etc., etc.:

The Climate.—Not only from the fact of there being a full half of a degree of latitude in favor of Texas sugar lands on the average, over Louisiana, but from the ranges of the mercury and facts observed, I would say that the climate of Texas is milder. The mercury in lower Texas never falls below twelve degrees, whereas in Louisiana it has been as low as ten. The orange trees and tender plants are killed in both countries about once in ten years. The great bug-bear, a norther, so much talked of in Texas, is on chemical principles, felt more by our nerves than shown by the thermometer, which shows nothing very cold, whilst animals suffer under it from the general sweep of the wind. It would be the same in Louisiana if the useless swamps, which are quite as large as the prairies of Texas, were as much exposed to the winds. The sea air has a greater effect in Texas to equalize the temperature than in Louisiana, from the extent of the coast and numerous bays. The Palma Christa, the egg fruit, the okra and other tender plants grow with great luxuriance, and in Texas approach the size of trees. The sweet potatoe and sugar cane flower in this climate, and the cane rattoons to such perfection that fair crops are made from rattoons of five years old. Of this more will be said in its proper place.

The Seasons.—The seasons are a little more inclined to be dry in Texas than in Louisiana, which is an advantage, as crops are injured more by excessive wet than dry weather. In an average of five years in Texas, only one was too wet for good culture, and none too dry for good crops of sugar and cotton. The soil of Texas when pulverized, has an open texture which lets down the roots of plants to the moisture, instead of baking into a tight pan or crust, as is the case in Louisia upon the Mississippi river and on the Teche. The planters in Texas, if there be moisture enough from rain, to bring up the plant, feel secure of a crop.

Storms.—The tornado scarcely ever invades Texas, owing to some conformation of the coast, and gales are rarely strong or long enough in duration to blow down either cotton, corn or cane.

Fertility.—The soil of Texas is better tempered, and therefore richer than in Louisiana. It seems preposterous to assert that any soil can be richer than the alluvial of the Mississippi river, yet that has often either too much clay or sand, (oftener the former,) which renders it tight and unkind, or too porous. The sand drifts from the overflows, prevent it from having the substance necessary to great fertility. In Texas the lands of Caney, San Bernard, Oyster Creek, Brazos, Colorado, and of many other regions, are a black soil, mostly a vegetable mould for five or six feet down, and mixed enough with loam and sand so as to be rightly tempered for great fertility. Three thousand to four thousand pounds of seed cotton are about the average produce in good seasons, and full four thousand have been raised to the acre, and sugar in proportion. No lands can be richer than the bottom lands of Texas.

Cost of Lands.—In Louisiana, the sugar land on the Mississippi, Lafourche, Terrebonne county, Attakapas, and other places suited for the culture of sugar, will cost on the average, when improved, forty dollars per acre. In Texas, lands equally as rich and better tempered, will only average from three to five dollars an acre, making a difference of at least seven-eighths in the outlay or investment, which would overbalance a thousand inconveniences, if they did exist.

Navigation and Getting to Market.—In one-third of the sugar district of Texas, the navigation of the Brazos, Bernard, Oyster Creek, Colorado, Guadaloupe, Navidad, Trinity, Jacinto, Neches, Sabine, Caney, Lavacca Bay, Matagorda Bay, Neuces, and other waters, let out the crop as easily as the average streams and bayous in Louisiana. In the other two-thirds, the cost will be something more for transportation, say one dollar a hogshead more than in Louisiana, which on the wide average for all the crop will be three-fourths of a dollar more to the hogshead for the whole State, and this cost would be ten times made up by other facilities that can be easily appreciated and clearly pointed out.

Quantity of Sugar Lands in Texas.—In Louisiana, by Champomier's statistics, there are now about nine hundred plantations, large and small, all told, in sugar, which have never produced over two hundred thousand hogsheads, and on the average only one hundred and forty thousand.* If more be put in culture all the inconveniences appertaining to the remote districts of Texas, will attend it so that the heavy draining and other inconveniences there, will make any new lands equal in cost to the old places, before a crop can be realised.

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* Mr. Champomier estimated the number of sugar estates for 1847–8, at twelve hundred and forty. It will perhaps exceed thirteen hundred. New regions in Louisiana are every day taken into sugar culture.—Editor.

'e in Texas in connection with wood, fertility, navigation and by my estimate now (not counting eventual facilities to be improved navigation or railroads,) the following amount of ited for sugar on the streams named respectively:

ter Creek, both sides, for 120 miles following its meanders ind for	120	*Plantations.*
;os river, counting two to three miles on ach side,	200	"
Bernard, both sides, counting two miles ut from it,	70	"
ey, for sixty miles, following its meanders, nd two miles each side,	140	"
rado,	100	"
ity, both sides, three to four miles out,	120	"
dalupe,	80	"
idad,	40	"
palacios,	30	"
ita and other small streams near,	40	"
ces and San Antonio, near their mouths,	40	"
ıeca and small streams near,	40	"
nto,	70	"
ng Creek,	50	"
hes,	40	"
ne,	30	"
olate and neighboring bayous,	30	"
:h Creek,	40	"
ır Lake and river and other points near,	20	"
and Cummings' Creeks,	40	"
itermediate grounds more than three miles ack, between all the waters,	100	"
	1440	

ove does not include the wide spread prairie, much of which , nor the Rio Grande lands, owing to the want of safety for owner there at present. This, of course, is only an approxi- imate, some of the numbers being probably too large, and o small, yet the error cannot be large enough to be of any im- The estimate is for the average size of the plantations in a, that is to say, about one hundred and fifty hogsheads each, fficiency of timber and wild land for further increase.

ı.—Texas is a country infinitely dryer and with fewer swamps r circulation of air than Louisiana, and experience says that are more healthy, and multiply faster. The loss by sickness h among negroes, has been estimated at ten per cent. less on alluvial bottoms of Texas than on similar lands in Louisiana. robably very near the truth.

cts per Acre, and Quality of the Sugar.—Two hogsheads, the effort or trial goes, are very common to the acre as a fair n an average year. The quality of the sugar, drier and whiter, grain better and firmer. The samples compare with the best a, and appear better and the molasses less in quantity. I think it will be dry enough to box. It is proper to remark that the manufacture of Texas sugars has been generally a matter of experiment with most planters in Texas. The quality of the juice is different, and probably requires some difference in the process of boiling, etc. Besides, most of the planters here commenced this business without any previous experience, and many failures have taken place solely from a want of knowledge. A conclusive proof of this, is the vast improvement that is manifest when we compare the late samples with those of former years.

Ratooning.—Good sugar and cane thick enough for a stand, has been made from seven year old ratoons. A small falling off in the stand occurs about the fifth year, and all experience goes to say that for five years the ratoons will do well. In Louisiana, three years are as long as they succeed well, when it becomes necessary to replant, and some doubt about the policy of leaving them that long, I would say that two years will be gained in the ratoon in Texas, which is a great saving. This must be owing to the better climate of Texas and to the drier soil which preserves the root better.

Cultivation, Coco and Grasses.—There is no coco in Texas yet, and but little crop grass. Half of the cultivation with a plow is all that Texas would require in comparison with Louisiana, both to keep the crop clean and the land light and fine.

Supplies for a Plantation.—In Texas all plantations will raise their meat, both beef and pork in abundance. The stocks of cattle require no care, and hogs but little to furnish all that is wanted of meat; and corn grows abundantly and easily for the supply, up to any demand. In Louisiana all the meat, and, I would say, half of the corn and hay must be purchased. The difference in provisioning two places of the same size will be, in Texas only one-fourth of what it is in Louisiana. The rich meadow-like prairies covered with a luxuriant growth of grass lie near and contiguous to all the plantations in Texas, and these not only furnish meat for nothing, but if bought will cost only 1 1-4 cent a pound, and bullocks of five and six years old weighing 650 pounds, can be had generally from six to eight dollars a head. Mules can be raised, as well as cows, hogs, and sheep, without any feeding summer or winter.

Lumber, Staves and Brick.—There is a great scarcity of Cypress in Texas adjoining the plantations. In two-thirds of the cases, Cypress and Pine lumber will have to be brought from a distance. In Louisiana not more than one-third of the plantations have to get staves from any other place. But all will have to get this material from abroad in time, and this may be counted upon. The cost of getting cypress staves and building timber is not very much, and will form a small item compared with buying provisions, teams and fuel. Brick are easily made on all the places in Texas, the clay being generally good. Should the sugar be made dry enough to box (which is very likely to be the case) then any wood could be used, such as cotton, poplar, sweet gum, sycamore, elm and other kinds, and a circular saw would also cut all such timber into staves or boards for boxes.

Fuel now, and eventually.—We have shown that upwards of a thousand plantations can have wood in abundance in Texas. In Louiie-fourth of the planters are now without wood, except drift or ifted from a distance; one-half are rapidly exhausting their nd have to go from three to six miles into the very worst of for it. They are also compelled to dig canals, costing from to $20,000 to enable them to get it out. Should we have to upon rafts the supply is at hand, for all the rivers of Texas wooded up towards their heads, and in the freshets its rafts sent down as cheaply as on the Mississippi. Coal can be got ng cheaper in Louisiana if necessary. Our mineral resources is are not yet well ascertained.

pective advantages, such as appreciation, etc.—Any good su- ls purchased in Texas at a price within $5 an acre, will become years worth $20, and more if improved. The natural tendency States to equalization in prices with reference to all the facili- position, is certain, and a balance becomes struck by the opera- things, crediting the one with the advantages, and debiting the ith all the inconveniences. Investments, therefore, in Texas inds would be better and more certain than in any other spe- property, and the appreciation would be at least one hundred t. in from three to five years.

lends on Capital.—If a given sum, say $100,000, in Loui- ives six or ten per cent. per annum, a fortiora, $30,000 in Texas lishing fully as much, would, under the superior advantages, or 30 per cent. per acre. This is a moderate estimate.

nses of a Plantation, preparatory and annual.—The heavy g, levying and draining in Louisiana will exceed the same in ive times; cost of provisions and teams all of five times; fuel s much. The preparatory expenses of a plantation in Louis- erefore, will be for the above preparations of draining, canal- ying, all of three times as much as in Texas. If these im- ents are already made, they must be paid for in the advanced f lands, being about $100 per acre. I would then say, one- e expense can be saved in the start in Texas, while the annual s are not more than one-third as much as in Louisiana.

lopment hereafter.—Within the last twelve years, a population millions from Virginia, the Carolinas, Georgia, Tennessee and ky, have settled up to fulness, the Cherokee and Creek coun- Georgia, Florida and Alabama, forming half of those States, Western district of Tennessee, being a full third of the State, han half of Mississippi, half of Louisiana, half of Arkansas, Missouri and the Red river side of Texas. Now, with an in- population in all these States of 8,000,000, and half of all nds fully exhausted, may we not safely calculate that the stream gration, urged on by the present eagerness for sugar planting, important fact, (that will soon be known and appreciated) that ontains more than half the sugar lands in the Union, will set- balance of Texas and Arkansas as fully in two or three years as the other States are now settled?

large slave holders are very restless in all those States. They een investing in Louisiana and the Mississippi swamps until vated lands are worth $40 per acre. They will next

think it will opment will soon take place to
manufacture rise, as we have said, per
ment with facilities, and inconveniences,
and probab acted upon. The enterprise of
Besides ice must yield to facts.
previous by an article that lately appeared
want of that Texas can never be the rival
ment that want of fuel, and also, because the cane
former he article cites the authority of Judge
Rat Attakapas. The writer of this is a citi-
been he has not yet any interest in Texas.
occur of attesting its great advantages as a
years ing to submit the statements above made
as th irmation of their truth.
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AND THE SILK CULTURE.*

ar collecting and compiling information, and in engravings, we
tl whose publication commences with the present No. of the
t engaged for nearly one year in preparing it, and many years in
subject will be comprised in three parts, and is commended to
of the industry of their country.—EDITOR.

STRY; EARLY HISTORY: SKETCHES OF PROGRESS: PRACTICES OF THE CHINESE IN THE PRESERVATION OF THE MULBERRY TREE: CONSTRUCTION OF MANAGEMENT OF THE SILK WORM; COCOONERIES, TED BY CUTS; INTRODUCTION OF SILK CULTURE IN HISTORY OF SILK IN THE UNITED STATES: NATURAL S. FOR MAKING SILK; ADVANTAGES OF SOUTH STATES; COMMUNICATIONS FROM PRACTICAL MEN ON THE SUBJECT.

is the *interest*, of all nations, to guard carefully
should not only aim at the perfection of those

through my friend the Hon. Edmund Burke, of the recent date, in which you solicit for publication my silk *Culture*. I am ready to improve every medium to the advancement of this interesting and im- great pleasure, sir, to comply with your wish, and am that you have considered this a subject of sufficient columns of your Review. In my opinion, sir, they more intrinsic value, or that which more intimately the general public. The business has had its advocates ory, and silk of superior quality has been making for innumerable obstacles have retarded its progress from been done to establish beyond cavil the fact that soil, and *all* their natural facilities are peculiarly silk—and our people equally adapted to its manufac- and finished fabrics of which the article is suscepti- men in this nation, who, if they have examined this position. It has been too often and too

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* NEW YORK CITY, December, 1847.

occupations with which their citizens are already familiar, but
'y consistent encouragement for the introduction of other and
ıches of industry which may be made to contribute to the sup-
ɘir own necessities and luxuries, or produce articles valuable
ıerce. It is pre-eminently important that, "We, the People
nited States," by the blessing of heaven the most free, the
ular, the most thriving nation of the earth, should *live within*
ns. If this is good policy for individuals and corporations, it
ɘly more so when applied to States and nations. Well would
een for us had we long ago conceived, practically, the impor-
this great truth. Land and labor are with us the only legiti-
rces of wealth, and our evident interests demand the exercise
ı policy as shall secure the steadiest employment, and lead to
opment of these, our *natural capital.* Unpardonable disgrace
:tend indifference or neglect in these respects. Unemployed
labor injudiciously or unprofitably employed, should be con-
ı calamity as carefully to be avoided as famine, pestilence, or

nnot conceive of greater inconsistency than that of sending
ɘe to fifteen thousand miles for any article of our consumption
ır own labor and skill, in the appropriate use of means which
as provided might create. And yet it cannot be denied, this
ıs incongruity has attached itself to our government and peo-
since our independence; and that in reference to an article
nsely more value in the aggregate than any other product of
ndustry.

article is Silk, the beauty and richness of which were not
ed when in the reign of Tiberius (A. D. 14) its use was
d by sumptuary laws to women of rank and fashion, to whom
iderations of cost were trifling; or, when (A. D. 222,) the
luptuary of Syria, Heliogabalus, in the extremity of his
ance as charged upon him by Roman authors; he wore a
um, a garment made entirely of silk; nor, when its purchase
the payment of its weight in gold, which was assigned by
(A. D. 273) as a reason for his refusing his empress so great
'. This great mistake has cost us *hundreds of millions of*
and continues every year to extract from us $12,000,000 to
000 of our best money.

ll this might have been avoided had we adopted the principle
ulcated. But for this political insanity we should at this
: realized the prediction so often made, that we should be-
he greatest silk producing country of the earth," supplying

ıonstrated under the most untoward circumstances to admit of a single

ith transmit the manuscript copy of a brief treatise on the culture of
ı has been prepared in accordance with your expressed desire.
ıope that it may be instrumental in awakening favorable public notice;
ıg to this enterprise the attention its importance demands, it is respect-
ıitted by,

Sir, your most obedient servant,
A. C. VAN

our own demands not only, but exporting largely of the raw material to Europe. With our national treasure unembarrassed, and our citizens generally engaged in remunerating pursuits; the addition of new staples seems not so imperative, although sound policy would *then* demand it, but the fact is far otherwise. The absorbing question among politicians for the last three years has been, how shall we increase the *revenue* of the country? And how has this question been disposed of? Has it been settled to the interests of the government, the content and prosperity of the people? Has any thing been proposed likely to effect the object?

An alteration of the postage laws has been resorted to, and the duties on imports changed—some contending that a *high tariff*—and others a *low tariff*—or *no tariff at all*, would better answer the end in view; but still increasing embarrassment is the cry—and for aught we can see, must continue to be—who knows how long?

We must have a system of postage agreeable to the people, and duties so arranged as to favor home productions and manufactures to the fullest extent—but after all, we must fall back upon the *pockets of the people;* for if there be not gold there, nor in their hands the means to produce it, we look in vain for it in the treasury, from *any* and *every* channel.

If then the profitable employment of the citizen and the prosperity of the government are so nearly identical, it becomes at once an important inquiry whether the energies of our people are fully developed; and if not, what new object of industry can be adopted with a view of increasing their staple products and augmenting their income. These questions have received a good share of attention, and under improved systems of cultivation which have been introduced, our lands have yielded an increased abundance—with a corresponding increase in their quality and variety. The culture of Silk, however, by far the most important subject claiming our attention at the present time, has been almost totally neglected by both government and people. It is the object of the following essay to present this subject anew to the consideration of our people and the regard of the government; and we can but believe, that the representations here made, and the arguments adduced, will have the desired effect. The writer has been so long and so deeply interested in this subject, that it would not be strange, if in the expression of his views some extreme opinions should be advanced—but we believe no such *extremes*, should they occur, will be found detrimental to the general good. It has been our aim to render every part of our work as correct and practical as possible. All the sources of information to which we have had recourse are of the most established and reliable character.

We would not close our remarks here, without expressing our gratification that the pages of the Commercial Review have been most generously offered for the discussion of the Silk Question. We rejoice exceedingly that so popular and influential an instrumentality should at this crisis come forward for the advocacy of a great and noble enterprise in which the whole nation is interested. Its circulation too, being principally in those parts of our country where the business can be most readily introduced and carried to the greatest perfection; adds greatly to its value as a channel of public communication. It will afford us much pleasure to answer, as we shall be able, any inquiries which this treatise may elicit, and to aid in every possible way the advancement of Silk culture *at the* "*South and West,*" and *generally.*

The discovery that the web of the *silk worm* could be converted into fabrics; and that this uncomely insect could be made to pay tribute to the necessities and luxuries of mankind, was second to none other recorded in the history of the world. When the length of time during which silk has been made and used, is considered, and the great value always attached to it, it is impossible to conceive the immense aggregation of wealth which has been involved directly or indirectly in its production, manufacture and employment as an article of apparel. If we combine all other substances ever employed for the raiment of the human family, their value can hardly exceed, if indeed it equal, that of the single article of silk.

When *the empress Si-ling-chi*[*] was watching the curious operations of this insignificant insect in the forests of Northern China, over *four thousand* years ago; and even when she succeeded in domesticating the worm, unwinding the fibre and converting it into an article of dress; she could have formed little conception of the variety of its subsequent uses, or the extent to which it was destined to mingle in the commerce of nations then unborn, and in portions of the earth unknown for many centuries afterwards. It is almost incredible *now,* with the statistics of *four thousand five hundred years* before us, that, from the eggs of an insect so minute, that at its hatching, thirty thousand scarcely weigh one ounce; should originate an article of such unequalled magnitude as that of Silk. Millions of persons are employed in cultivating the mulberry tree and rearing the silk worm; and other millions in the operation of filatures and manufactories; while thousands of ships, and magnificent storehouses, with their numerous attendants, are required for its conveyance and distribution through innumerable avenues to the hands of its consumers; whose number equals the entire population of the civilized world—for *who does not wear silk?*

Very appropriately has the Empress, in whose hands this industry had its origin, been styled and deified as the *Goddess of Silk Worms*; and we can almost justify the yearly homage paid to this goddess by the Chinese peasantry.

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[*] All who have ever written on this subject accord to this Empress, the wife of *Ho-ang-ti,* the credit of having first examined the cocoon of the silk worm with the view of ascertaining its nature, and the possibility of its being rendered valuable.

Their own authors under the several dates noted, write as follows: "The lawful wife of the Emperor (*Ho-ang-ti,*) named *Si-ling-chi,* began the culture of Silk." (Book on Silk Worms.)

This great Prince, (*Ho-ang-ti*) was desirous that *Si-ling-chi,* his legitimate wife, should contribute to the happiness of his people. He charged her to examine the silk worms, and test the practicability of using the thread. *Si-ling-chi* had a large number of these worms collected, which she fed herself, in a place prepared solely for that purpose, and discovered not only the means of raising them, but also the manner of reeling the silk and employing it to make garments." History of China, by P. Mailla—written, according to the Chinese Chronology, 2602 years before Christ.

If the importance of this discovery was not at *first* realized, that they did not long continue ignorant on the subject, is apparent in the *fact* that it became at once the favorite pursuit of the most distinguished, and was introduced at each recurring season by royal example; and before it had time to acquire a name, it was surrounded by the government with every possible protection which the ingenuity of that jealous nation could devise. So successfully was this protective policy adopted and adhered to, that, up to the middle of the sixth century, it does not appear to have been supposed, beyond the confines of China, that silk was the product of a worm. Even the Persians, who had long controlled the carrying trade between China and other countries of Asia, do not appear to have dreamed of the origin of the precious commodities composing their commerce; and, but for the most ingenious stratagem by which it was wrested from them, it is difficult to determine how long it must have remained a secret. Towards the close of the sixth century, this product of the Chinese had become so universally admired, and so highly valued, that, notwithstanding the exorbitant prices exacted for it, it was impossible to obtain a supply. With a view of opening a new medium of communication, Marcus Antoninus undertook to supplant the Persian monopoly—but his embassy was rejected, in common with all other applications for foreign intercourse by any except those whose integrity had been thoroughly tested and approved. This movement excited the spleen of the monopolists, and its failure encouraged their avarice. The passion for dress which the Romans carried with them to Constantinople, served to increase the demand for silk beyond all precedent—and the Persians, in their dreams of gain, carried their impositions beyond all endurance.

This was a crisis of the greatest interest in the history of silk, and calls for particular notice. An eminent author, in reference to the same period, writes as follows: "A war with the Persians occurring in the reign of Justinian, induced that monarch to obtain supplies from a more eligible channel. Through a deficiency of the requisite experience and qualifications necessary for so difficult an undertaking, Elasban, King of Axuma, and Esimiphæus, Governor of the Hermorites, in Arabia, to whom, for this purpose, Justinian had made application, failed to fulfil their engagements; and silk, in consequence, rose at Constantinople to a height before unknown. This the partial supplies usually afforded by the Phœnician manufacturers, would have considerably relieved, had not Justinian, with a blind rapacity, that, in his aim to augment the revenue, effectually defeated itself, imposed heavy duties on the importations, which became absolutely prohibitory. In consequence, the merchants were ruined, the scarcity of silk was equivalent to absolute privation, and the failure of a revenue, whose increase was contemplated by Justinian, was a practical sarcasm on his avarice."

Thus we have, in the history of silk, arrived at a very important norable crisis. Silk was produced, even from the earliest regions congenial to its culture, where, in consequence of sings it confers, the inhabitants proclaim themselves *celestial*, diously withhold all knowledge from what the benefit is de-

isect, as if in some land of enchantment, labors, spins, and id without leaving itself even a sarcophagus, bequeaths its more valuable to man than the proud monuments of the n architect, its robes, more golden than Jason's fleece, and state, by the bale and cargo, to the men of Hesperian climes, ow not either of its existence, or the mystery of its opera- The elegance of the fabrics is admired by all; Europe in- ie commerce; a difficulty unmanageable in the ordinary of things occurs; a crisis arrives; THE OLD EPOCH IS CLOSED, EW ERA, most important in its history, ARRIVES. How fre- has relief come, not only at the moment of extremity, but most unexpected means. Justinian failed in his diplomatic ion to the Arabian princes, as well as his predecessor had the Chinese Court; and his very attempt to force a trade means of its almost total extinction. But how could it have rescen that what emperors, ambassadors, and merchants fail- complish, would be effected by means so unlikely as by two atively obscure Nestorian monks? The preachers of the of Nestor, exiled by the government of Byzantium, had ndia; and missions, convents, and bishoprics, by their patri- sident in Persia, had been, according to the testimony of Cos- tablished in every direction. Two of the monks penetrated ountry of the Seres. With curious eye they had observed ss of the Chinese; the manufactures of the silken fabrics; millions of insects, whose education was the care of queens, ing the leaves of a tree into silk. All the manipulations re- from the embryo state of the little animal, to the production costly material, were marked with intense interest.

secret was out! two monks in possession of it—the knowledge fit myriods was entrusted to two—the perils of traversing a itinent were yet to be encountered—a risk was to be incur- insurance was affected, but that of Providence: thus all was nd the two monks, our benefactors, bequeathed a mystery hid , as a legacy to a western hemisphere. Aware of the solici- the Europeans on this subject, the monks repaired to Con- ple, and first revealed to the emperor the secret that *silk* was d by insects, whose eggs might be conveyed to his dominions. e to indulge in the conjecture what, most naturally on such ntous occasion, was the passion chiefly excited in Justinian, mportant juncture, when a report, than which none could be teresting to the secular concerns of man, was first announced ars, our charity might have inclined us to point to philan- r, had we not ascertained the character of the man. With several occasions, self was a universe, and all within it his , whose interests were to be consulted precisely to the point where they concerned his own. By the promise of a great reward, the monks were induced to return to China, elude the vigilance of their jealousy, obtain the eggs, and to confine within the narrow precincts of a hollow cane, what was subsequently to create machines and factories, fill warehouses and ships, and become inexhaustible mines of wealth to nations. They succeeded; and in the year 552, they were in Constantinople, and their cane, like Noah's ark, contained a family, whose posterity are now filling regions wider than those peopled, within the same time, by Shem, Ham and Japhet. "The insects thus produced" says Lardner, "were the progenitors of all the generations of *silk worms*, which have since been reared, in Europe and the western parts of Asia;"—to which may now be added America and Africa—"of the countless myriads whose constant and successive labors are engaged in supplying a great and ever increasing demand. A caneful of eggs thus became the means of establishing a manufacture which fashion and luxury had already rendered important, and of saving vast sums annually to European nations, which in this respect had been so long dependent on, and obliged to submit to, the exactions of their oriental neighbors."

No sooner is this new and interesting colony in Europe, than the avarice of Justinian seizes the cradle of the infant concern. His own treasurer had the control, the monks the direction, weavers brought from Tyre and Berytus, were the creatures of the new monopoly, and his became the prerogative to fix the price which his subjects should pay for the indulgence of their vanity. The price of silk, by this means, became eight times more exorbitant than before the introduction of the silk worms; an ounce weight of a fabric of *common colors* could not be purchased for less than six pieces of gold, but the royal purple was of quadruple value. Fortunately for the public good, the oppressors of mankind live not forever: Justinian died; and the monopoly ceased. The people of western Asia and Europeans discovered that, neither the mulberry tree nor silk worm, wanted either Chinese climes, or the care of a Justinian to foster them. Mulberries were planted in all directions; and the insects fell to work with haste as eager, as if they had never known that their ancestors had been silk worms royal to his highness Justinian. After the death of this emperor, (A. D. 565,) we find the culture and manufacture of silk transferred to Greece, especially Peloponesus, and to the cities of Athens, Thebes, and Corinth. Soon after, the Venetians entered into commercial relations with the Grecian empire, and conducted the carrying trade, for several centuries, to the western parts of Europe. Such was the estimation in which this manufacture was then held, as appears from the example of Charlemagne in the year 790, sending two silken vests to Offa, King of Mercia, that it was considered worthy of being made a royal gift. Greece, notwithstanding all discouragements consequent upon the continued and rapid decline of the Roman empire, continued to excel all other nations of Europe in the quality of her manufactures. She alone, for near 600 years, possessed the valuable breed of silk worms; soon produced wrought silks adequate to her own consumption; a recourse to Persia for a supply ceased, and a material change followed in her intercourse with India.

We deem it unnecessary to dwell at greater length here upon this part of our subject, and shall therefore give our attention to that which will be more interesting and profitable: the means by which the Chinese attain so much perfection, and secure such uniform success. Disease amongst silk worms there is so uncommon as scarcely to have attracted the attention of their authors; it would hardly be supposed from what they say, that the silk worm is subject to ailments of any kind. It is positively asserted that they do not lose one worm out of a hundred by disease; which seems to have been a matter of much surprise in France, where the most successful establishments calculate upon a loss of fifty per cent. It is very reasonable to suppose that, in this extended experience, we shall find some peculiar processes by which they are secured against the casualties common to other countries.

The very circumstances under which the silk worm was abstracted from China, precludes the possibility of any very extensive and accurate knowledge of its managemeut, and every attempt to obtain such information since has been fruitless until within the present century.

When the spirit of *inquiry* and *inquisitiveness* can no longer be controlled, and *valuable secrets* are not safe through the possession of walled empires. Access has at length been obtained to Chinese libraries; and works treating extensively and minutely of this entire subject have been carefully reviewed. They form a part of their works upon agriculture, of which there are several hundreds, included in a collection of one hundred and sixty thousand volumes of the most valuable publications in the Chinese language; but among all this immense library and the twelve thousand volumes composing the royal library, there are but three books devoted exclusively to silk culture as a distinct branch of their industry. These were written long since and have passed, in fact, through a new edition within the last two or three hundred years. To the essential parts of all these works we have incidental access through recent translations into the French language by M. Stanislas Julien, at the instance of the Minister of Public Works, of Agriculture and Commerce; to which is prefixed a valuable introduction by M. Camille Beauvais. While in manuscript this translation underwent a most critical examination by M. Louis Hebert, whom the French government employed for some time upon the coast of China with the special design of studying the methods of those countries, and of bringing back any precious varieties of mulberry trees and silk worms which were unknown to French culturists. This with other works of great value treating of this subject, are included in a collection of one of these,* to which particular reference will be made in another part of this treatise, is work on "Filatures," by M. Ferrier, inculcating precisely the views we have entertained and urged for the last three years, and which alone can secure the success of silk culture in any country. From the work first named, together with a book of Chinese painting prepared for Dr. Stebbins, of Northampton, Mass., which have been fully explained to us by *Sum-Sing*, a Chinese artist of the Chinese Junk recently in this city, who is entirely familiar with the production of silk in his native country; we shall be able to give a very full and correct exposition of the principal methods practised in China. We shall do so more in compliance with a general curiosity to know of their management, than from faith in the superiority of their practices. In their cultivation of the mulberry tree and treatment of the worm—we can learn much; but their care of the eggs which we shall notice elsewhere, consists of a routine of unmeaning attentions, which one would suppose must prove entirely destructive to the embryo worm.

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* More than a hundred volumes of valuable French works recently presented to the American Institute, by M. Vattemare.

In every branch of the business we may learn much from their excesses. If they are *extremely* careful, it will be found a less dangerous error than the irregular and *careless* manner in which it has been managed in this country as well as in many parts of Italy and France.* We shall first notice their treatment of the mulberry. No expedients have been left untried that were calculated to lead to the general propogation of this tree. In some provinces men were compelled to do it; while others succeeded better by liberal bounties. Hence we read: Tchin-in, being Governor of the province of Kieute, ordered every man in the nation to plant fifteen feet on each acre, with mulberries.

The emperor gave to each man twenty acres of land, on condition of their planting fifty feet with mulberries; (*Memoirs upon provisions and Commerce.*) When the agricultural labors are terminated, or when rain prevents persons from working in the fields, every thing must be taught relative to the mulbery-tree. (Annals of Northern China.)

The emperor *Hien-tsong*, who ascended the throne in 806, ordered all the inhabitants of the country to plant two feet with mulberries in each acre of their grounds. (Annals of the dynasty of *Thang.*)

The first emperor of the dynasty of Song (960) promulgated a decree to prevent the destruction of the mulberry and jujube trees. (The leaves of the latter may be used for feeding silk worms.) [History of the dynasty of *Song.*] If among the people, men are found who grub up the uncultivated ground and plant a great quantity of mulbery trees. only the ancient tax shall be exacted from them. (Same work.)

Their works abound with similar passages showing the care ever exercised to promote the most extensive growth of the mulberry tree of which several varietes are used corresponding with the character of the climate and soil, of the province for which they are designed. The most common and generally approved appears to be a white mulberry bearing an abundance of thick, glossy leaves about as large as a man's hand. In preserving seed, the largest fruit is selected

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* And the fact that success has attended the efforts of culturists in this country in spite of all hindrances, is an evidence of its uncommon congenality.

l both ends cut off, the seeds of the middle only being consi-
red fit for use. These are washed, dried in the sun and immedi-
ly planted in a bed of rich earth, previously prepared for the pur-
se. These are kept carefully watered and free from weeds. In the
ing the small trees are taken up and transplanted in grounds suit-
y prepared. They are planted in rows four feet apart each way,
l cultivated with a hoe and spade. In the spring of the year, when
y are considered sufficiently matured, they are again removed and
nted into permanent orchards, where they are set about thirty
t apart. Another mode is to gather the fruit, which is ripe in
e, crush the pulp with the hands, and wash several times; when
seed is separated it must be dried in the *shade*. Ten acres of
tile land, or better, land for a long time uncultivated is prepared,
ere the mulberry seed, mixed with millet seed, is sown and left to
w up together. The millet ripens and is removed by the reapers
l the mulberries either removed or allowed to remain upon the
e ground.

he tops are cut off and the foliage from the shoots starting the
owing spring is used for feeding. Another writer says in sub-
nce as follows: When the time for sowing has come, the seed
st be mixed with ashes from the branches of the mulberry tree,
l then soaked until they become soft. The next day the seed
st be washed with care, and those that float rejected. The full
d must be exposed to the sun until the water absorbed is entirely
porated, when they are sown and do not fail to flourish. In an-
er work the subject is treated differently still conflicting some-
at with the preceding. We can give only the ideas. None but
r seed should be used. This should be sown in the shade or co-
ed with a sort of tent. The shade of hemp is unfavorable, that
millet still more so. Between each plant five to seven inches
uld be left, and kept carefully watered until they attain the height
hree feet, the shade should then be removed. In November the
es should be cut even with the ground, dry grass spread over
m and burned; taking care not to have the fire too hot or long
tinued. The ground is then covered with decomposed vegetable
nure. In the spring the surface is raked clean and the trees kept
l watered. Fine shoots spring up early, many of which, by fall,
in the height of six or seven feet. A distinction is made between
e and a smaller growth, and each is treated in a different man-
: the larger growth being generally prefered to those of a still
er variety—and are termed dwarf mulberry trees. The ground
eceive these is prepared as follows: The location must be well
tivated and manured. In one acre about two-hundred and fifty
es are dug each two feet square and two deep, into which is spread
ut a half bushel of well rotted manure, mixed with an equal quan-
of earth all made soft by water. Into this compost the tree
rmly placed, the top of the stalk cut off even with the surface of
earth and the hole filled with well decayed earth.

he next day this is tramped down so as only to leave the hole
f full; the remainder filled and slightly packed. A small hil
de over the top of the stalk, which must previously be bu

with a hot iron, so that the shoots will all start from buds under ground, this giving them greater strength and security against winds and storms. Several buds will send out trees, and in order that they may not become too thick, only two branches are cut down close to the ground every year, and earth covered over, so that all the new sprouts of the succeding year may start from buds under the ground. As the roots become strong, a greater number of branches are allowed to remain, until, in a few years an immense mass of foliage is produced, and the quantity of roots formed, is astonishing.

The plantation of Dr. Stettins, of Northampton, Mass. is a good illustration of this method of culture. He has a small orchard of Canton mulberries, which from June to November present a most beautiful sight; and the amount of foliage produced is incredible.

This variety of mulberry was procured directly from China—for Dr. S., and is doubtless the same variety preferred in the best silk producing districts of that Empire. It was recognized as such, by a native Chinese, who recently examined it—pronouncing it the same, only presenting an appearance of greater thrift and perfection. It corresponds very nearly to the *Moretti*—if indeed, it be not the same, which some of our best judges believe.

From these seedlings, cuttings are taken; and in this way the mulberry tree can be multiplied indefinitely. A general preference is to be given to this mode of propagation, as the variety of the tree can thus be retained in its vigor. In this something like the following practice is observed. The ground is selected and prepared for the cuttings, as for trees just described; and soon after the buds begin to start in early spring, branches are cut about one foot in length and each end burnt. A part of the buds if there are more than three or four are removed. The only danger to be guarded against, as attending this method, is the effect of the suns of mid-summer—but if proper care is taken, a single plant is seldom lost. It is a pretty general practice to plant a few hemp seeds on the sun side of the hills to afford a shade. The following spring the trees with the cuttings attached, are taken up and removed to the grounds where they are to remain, and there planted with the same care as before, in rows about twenty-five feet apart, and ten feet apart in the rows. The ground between the rows may be ploughed; but never beetween the trees. The foliage is used the second year. In another work a more particular account is given nearly as follows: Towards the end of Autumn when the cultivators have much leisure, the grounds intended to be planted with mulberries the following spring, must be selected and all the holes dug and supplied with manure, so as to diminish the work of the spring when so many other things demand attention. The grounds should be raised on the south in order to retain the snows of winter and the rains of spring. In the last month of the year (January) the branches intended for planting in the spring, should be cut and the wounded part scarred by passing it quickly through the fire. They are then bound into bundles of about forty five each, and laid in a hole, prepared for the purpose, about the length of the trees, and three or four feet deep. Bundles of rice straw are placed btween those of the trees. These deposits of branhes are covered with a thick bed of earth, and thus preserved in erfect safety. After *Tchun-fen* (21st of March) the holes prepard in the autumn, are opened—manure, earth and water mixed in, nd twenty or thirty millet seeds planted at the south side. The rees are then removed for planting. Each branch is bent up in the shape of a hoop and tied in that position by a straw rope; and thus planted in the middle of the hole, and covered with three or four inches of earth. If the buds are started two or three inches they are covered deeper, and the earth packed firmly around them with little hillocks of light earth on the top. They must be shaded and kept moist. The trees from the buds grow rapidly and make it necessary to remove some of the lateral branches. At three years old they become fine trees. Some persons who wish dwarf trees, cut off only the extremities of the branches and plant them upright, so that the top just arises out of the ground. When this is done, several twigs are put together and thus planted. Others place the boughs in a raddish and plant it in a small square hole. These thrive well.

We cannot notice further this part of the work though much more is said, but with immaterial variation from what we have already given. These observations give a general impression of the plans pursued as well as they can be determined from this translation, which is in many parts quite crude and indefinite. None of the practices described, strike us as possessing peculiar excellence—but *one* important principle is carried out by every cultivator; a principle very imperfectly appreciated amongst us—it is, that the mulberry tree, to produce good and abundant foliage, must have the advantage of rich soil and careful cultivation. They not only select the best lands for their plantations but manure plentifully besides. Liquid manures are highly recommended and extensively used; also the sweepings of the cocooneries, ashes of rice straw, various aquatic plants, and paste made of beans, hemp and cotton seeds—besides the ordinary manures. Great use is also made of the sediments of canals and ponds which are often drained for this purpose. The plantations are generally surrounded with walls or hedges to prevent injury by animals. The earth around the trees is kept perfectly clean and loose, by frequent weeding and the use of the hoe and spade. No noxious plants or trees are allowed in the enclosure. Nighboring cultivators not unfrequently associate together for the purpose of managing the business to better advantage by a division of labor. Their orchards in such cases are included in one large enclosure proportionally subdivided by light hedgery, to prevent disputations, to which they are so much inclined. Grafting and budding are practiced to a considerable extent and are thought greatly to improve the quality of the foliage. The leaves thus produced are larger and thicker and seem to contain less unwholesome juice.

This requires a good deal of trouble, but we are inclined to think the plan a good one, where it is intended to have permanent orchards. It is being extensively introduced in the south of France.*

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* The first nursery we have ever seen any where was that of Mr. L. P. Fini
in this city These trees were grafted white mulberries imported from the
vennes Mountains in France, and for some time occupied a garden in Broad
and were removed *a year or two since* we think, to some part of Long Island.

The construction of feeding apartments next claims our attention. These are generally built in secluded locations and near or over the water when it can conveniently be done; that they may have the advantage of extreme quietness, and freedom from impure air and injurious insects. They are so constructed as to admit of the most perfect ventilation and yet as perfectly to prevent the admission of external air, when unsuited to the health of the worm: and always so as to govern the degree of light.

The greatest importance is attached to a uniform temperature, and means provided for securing it. In the center of the building is constructed an oven, of which the following is a description. In the middle of the house, a hole must be dug, of which the size must be proportioned to the dimensions of the house.

The ordinary size of this hole is about four feet square. On the four sides, a square brick wall, cemented with mortar, must be raised two feet in height. Cow dung, well dried, must be taken and reduced to powder, and the bottom of the hole covered with a bed of this powder three or four inches thick. On and in the middle of this, a layer of small pieces of dry wood must be spread, at least five inches in diameter, which has been cut in the last month of the year. Mulberry, elms, acacia, or any kind of hard solid wood may be used. Upon this another bed of powder must be spread, well beaten down, so as to fill all the openings between the sticks; for if any space be left, the fire would produce a flame which would be injurious, besides causing too rapid a consumption of the fuel. With these alternate layers, the hole must be filled and packed down as tight as possible, and then rounded up with the same. Seven or eight days before the hatching of the worms, live coals must be put on the top and covered over with hot ashes. The mixture readily takes fire, and emits, for six or seven days, a black and yellow smoke. One day before the hatching of the worms, the door must be opened to dissipate the smoke, and then carefully shut. From that time the whole contents of the oven are on fire, emitting no smoke, and can be preserved for a month or two without becoming extinguished or materially diminished. The warmth produced is mild and agreeable, and it can hardly be perceived that there is a fire in the apartment. It is well to surround the top of the oven, to the height of one or two feet, with a high brick wall, so that the heat may ascend to the middle of the room, and there spread in an equal manner. This will also prevent those persons who attend the silk room at night from falling into the oven. The house being constructed of dry materials, readily becomes warm and retains the heat. When the worms are to be removed from the nursery, the old paper on the windows must be replaced by that which is perfectly white and clean. The windows are covered with screens or mats, to prevent the escape of heat, and regulate the admission of light. Connected with the main building is a nursery, carefully constructed, for hatching and feeding the young worms. It is generally built fronting the south. These are fitted up with numerous small frames and shelves, and only light enough admitted to distinguish the moulting from the feeding worms; and this is obtained mainly through dormer win-s above the frames. Even with the ground, pipes, or air con-ors, communicating with the outside, must be placed at regular rvals, and arranged so as to be opened and shut at pleasure. : nursery building is also provided with an oven similar to the described, only smaller, and also a small stove in each corner, iches prepared for the purpose.

'he internal arrangements for feeding do not vary much in diffe-t provinces. We shall refer to only two, which are more general-ised than any others, as they are considered the best. One con-s of frames two feet long and two feet wide, supported at the ends slats fastened to upright posts extending from the floor to the ms or ceiling. The one at the bottom prevents the dampness of ground from ascending, and the one on the top screens from dust of the apartment. The other arrangement, which appears e an excellent one,—especially for nurseries,—is represented in cut, which will be given in next No. of Review.

'he construction of this frame is very simple; the hurdles, ch are made of split bamboo, very light and easily handled, ad-ting an unobstructed circulation of air through and around the nes.

Vith this reference to the feeding apartments, we shall notice, y briefly, the methods of hatching, feeding, and the general man-ment of the silk worm from the egg.

'he time of hatching corresponds very nearly with that of Vir-a, and the eggs are retarded or forwarded to correspond with the racter of the season. The care bestowed upon the eggs by the nese is almost incredible, and differs altogether from the prac-s of this country, and we can hardly be induced to attach to them advantage.

'rom about the first of December up to the time of their hatch- they are subjected to repeated washings in brine and river er.

'o these baths their authors attach great value, as securing uni-n hatchings and vigor of constitution. The subject deserves a sing notice in this place.

In a work entitled, Hoang-Sing-Tseng, the author observes: ; eighth day of the last moon, the eggs must be dipped in water ire the ashes of the mulberry branches have been boiled, or the es of grass. They must be taken out at the expiration of one . The twelfth day of the second moon, a bath must be given to eggs, on the morning of the period called *Thsing ming*, (5th of il;) then they must be wrapped up in cotton paper, and deposit-n the kitchen. Wait until the mulberry leaves are as large as aspoon, then envelope the eggs in cotton; covering them at night 1 garments that have been worn during the day; and in the ning wrap them in blankets.

Vhen the eggs are hatched, the worms must be warmed by artifi- heat; but so long as they are not out of the egg, they ought to vell taken care of, and hatched by the heat of the fire. When it esirable to soak the leaves of paper, covered with eggs, the ashes the mulberry must be used; the leaves should be moistened and powdered with the ashes. Afterwards they must be rolled and soaked in water where a certain quantity of salt has been dissolved. If the rolls of paper swim, they must be kept under water by placing them under a China plate.

The papers ought to be taken out on the twenty-fourth day. They must then be washed in running water to remove the ashes. Afterwards, they can be hung up in the cool air, and the eggs will hatch in due time. The twelfth day of the second moon, leaves of the plants called *thsai* and *ye thsai*, blossoms of the leek, peach tree, and white beans, must be taken and crushed in water, and this used as a wash for the eggs.

Many persons preserve the eggs in bamboo boxes, where they are exposed to all the changes of the atmosphere. If they are subjected to sudden transitions from cold to extreme heat, or the contrary, it produces fatal results. The worms thus injured in the egg, have a yellow appearance on hatching, and are never worth the trouble of raising. They may be compared to a child that has contracted disease in the womb. At its birth it is weak and feeble; and such innate ailments generally extend through life.

When one wishes to preserve eggs by this method, the papers should be spread on bamboo boards, secure from the sun or wind. They should also be covered with silk cloth, to prevent butterflies or insects from the cotton plant eating them. In the winter, when there is a body of snow, the leaves containing the eggs should be spread upon the snow for twenty-four hours, and then placed on the boards and covered as before.

When spring comes, they must be attentively watched, and every change noted, that their hatching be properly provided for. Powdered cimabar must be taken, diluted in warm water, and the eggs bathed in it. The water should be kept at the temperature of the human body.

Before the eggs are hatched, the papers should be weighed, and the exact weight written on the back of the sheets. When they are hatched they should not be separated from the paper. Many persons, as soon as the worms appear, detach them from the paper by means of a small broom or quill; but these little beings, as delicate and slender as a hair, or bit of silk, cannot support the wounds given them by the broom or quill. The better way is to cut some tender leaves into small shreds, and lay them carefully on the worms, to which they will speedily attach themselves, and can be removed without hurt.

The business of the feeding is entrusted to persons who confine themselves exclusively in the silk rooms. These attendants are required to be scrupulously clean and particular, and to study every want of the worm, and meet them with a prompt and appropriate supply.

The following things are named as being offensive to the worms, and to be avoided:

1st. Silk worms do not like to eat damp leaves;

2d. They do not like to eat warm or wilted leaves;

3d. The newly hatched worms do not like the smell of fish fried in a pan;

4th. They do not like to be in the neighborhood of persons who und rice in mortars;

5th. They do not like to hear strokes on sonorous bodies;

6th. They do not like men who smell of wine to give them food, transfer them from place to place;

7th. From the time they are hatched until maturity, silk worms read smoke and odorous exhalations;

8th. They do not like to have skin or hair burnt near them;

9th. They do not like the smell of fish, musk, or the odor of cer-in herbaceous animals, such as the goat, &c.;

10th. They do not like to have a window, exposed to the wind, to e opened during the day;

11th. They do not like the rays of the setting sun;

12th. They do not like, when the temperature of their habitation warm, to have a sudden cold or violent wind introduced;

13th. When their habitation is cold, they do not like a sudden hange to extreme heat;

14th. They do not like dirty or slovenly persons to attend them, r enter their room;

15th. Care must be taken to keep all noxious effluvia and filth istant from their apartments.

When the worms are first hatched, they are fed with the most ender leaves, cut into fine shreds, and lightly spread over them with sieve.

In the space of one hour (two of ours) they must receive four eals, making forty-eight feedings during the first day and night. eed must be given, without fail, both day and night. If this course pursued, it follows that they sooner attain their maturity than if hey are neglected. When they can be made to mature in twenty-ive days, the worms of a given space will furnish twenty-five ounces f silk. If twenty-eight days, only twenty ounces can be obtained. f the time be one month, or forty days, only ten ounces will be ade. In feeding, the attendants are required to visit every frame ith the greatest attention, and feed with perfect uniformity, that he worms of each day's hatching may not become irregular in their oultings.

The feedings are less frequent as the worms increase in size. It s common, beginning when the worms are very young, to use rice lour. It is sprinkled lightly over the frame immediately after the orms have been fed. When this is done, the leaves require to be ampened.

Dried mulberry leaves, finely powdered, are sometimes used in the same way. It is thought to strengthen the worm, and cause it to make a more perfect cocoon. One of the most accurate works, treating of this subject, says:

The leaves which are given them ought to be neither wet with dew nor dried in the wind or sun, nor impregnated with disagreeable smells; for as soon as they have fed upon such leaves, they will contract diseases. If care be taken to preserve, in advance, a sufficiency of leaves for three days, there will be nothing to fear from long rains nor a want of food.

The space of one day and night is, to the silk worm, like the four seasons of the year.

The morning and evening answer to spring and autumn, and the middle of the day and night to summer and winter. In these four periods of the day, the weather is never the same. When a good fire is preserved in the silk room, great attention should be paid to keep it of a uniform temperature during all parts of the day and night. The matron should wear only a single garment, and regulate the temperature according to the sensation of heat or cold she experiences. If she feels chilly, she will judge that the silk worms are cold also; and so when she experiences oppression from heat, will the worms be affected. An increase of heat immediately after feeding encourages the appetites of the worms, and causes them to eat with great avidity.

To effect this, a long stove, placed on a hand barrow, is used. When the worms have been fed, and had time to ascend the leaves, this stove is carried by two men through the aisles, until a gentle heat has diffused itself among all the hurdles. The fire in this stove should consist of burning charcoal, so as to prevent smoke, and covered with ashes, to prevent too brilliant a flame. When the worms have finished their eating, the stove must be carried back. This is repeated at each feeding, if the air of the room is in the least chilled.

The various moultings are attentively observed, and every preparation made for the necessities of the worms. They are not suffered to remain upon their moulting beds for any length of time after their awakening; but are removed* promptly to fresh frames, covered with rice straw, crushed in a mill.

The rapid growth of the worms renders it necessary to remove and separate them, constantly, which is done with the greatest care and affection. Any neglect or carelessness may be followed by diseases and losses. The weakness and delicacy of the worms should never be lost sight of.

Entrance of the silk worms into the Cocooneries.

Whe the worms indicate a desire to spin, they are removed to cocoon rooms, which are generally constructed separately from the feeding apartments. These rooms are provided with various descriptions of winding frames. As this has been, and is yet, a subject of much discussion and difference of opinion in this country—it claims at least a passing notice. A country so long engaged in making cocoons—must necessarily have acquired a pretty accurate knowledge of the best methods of spining—this would be our judgement of any other country, save China, and is doubtless true of them to some extent, notwithstanding their unreasonable adherence to ancient usages.

We have just said that the spining is done by distinct rooms. In the southern countries these are generally placed in the house, as

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* In the removal of the worms, a frame of net work is used, somewhat similar to those used by many persons in this country.

rms are there fed; and besides the early rains occurring at
ing season, forbids their being placed in the open air. At
h, the rooms are larger and placed outside of the house,
e may be no obstruction in the circulation of the air. A
warm place must be selected, in order that neither cold nor
s can penetrate into the interior of the cocoon rooms. When
ns approach their maturity, a fire must be lighted on the
where the room is to be located, until it is perfectly dry;
ds the remains of the fire and ashes must be swept away.
ription of cocoon room is constructed as follows.

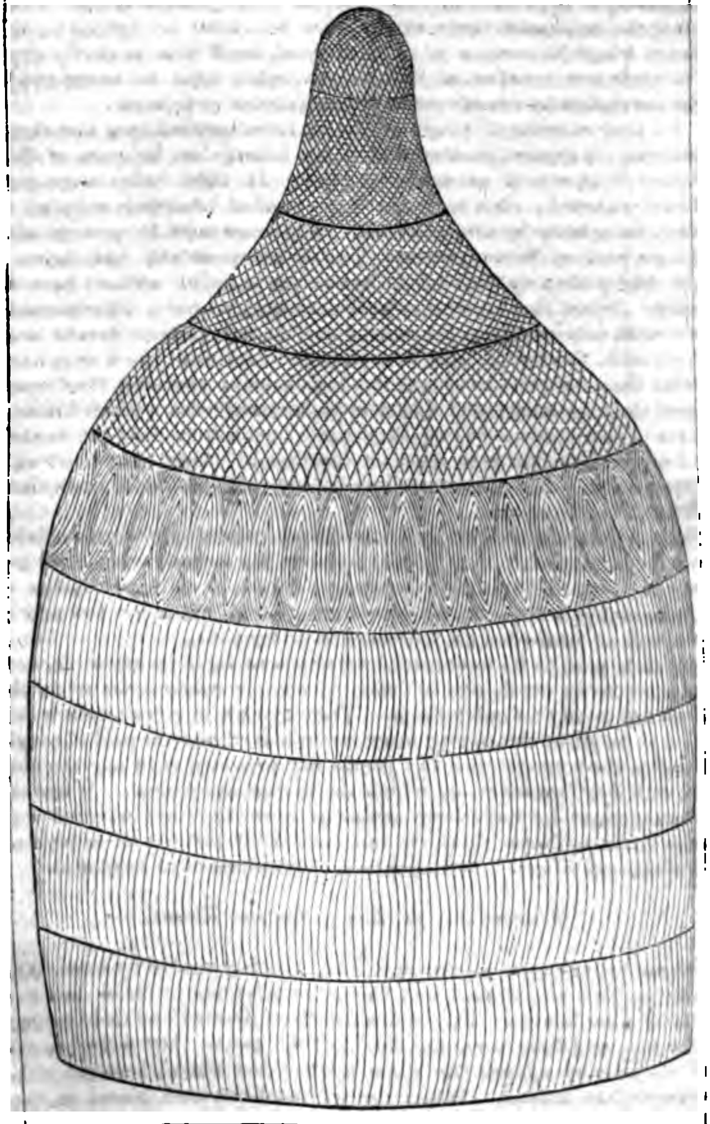
oor is made of plank of the fir tree, six feet long and three
. A frame, pierced with large holes, must be made of thin
from which arrows are made. In these holes some rods
inserted; then long and large bamboo branches, stripped of
ves, must be croped above. The room must be covered with
work of woven reeds. The silk worms will here have a
ere they can establish themselves in safety without fears of
When the interior is well arranged, where it affords neces-
th and security, the worms may be successively spread over
irst, the frame must be a little inclined until the worms have
heir excremental matter which always precedes the forma-
eir cocoons; and afterwards, warmed with a small brazier,
f live coals. When they have begun to inclose themselves
cocoons, the heat must be increased. They *must never stop*
work. If the temperature be too cold they walk upon their
cease to spin.

persons, particularly at the South, where silk worms are fed
amusement than profit, remove the worms, when they are
spin, to their own houses. They spread short stalks of
ts upon the frames on which the worms were fed, and in
ls of branches they deposit their cocoons.

er plan is to construct long sheds of light frame work, cov-
n straw mats, and in these place their cocooneries when the
re ready to enter them. They are set in rows on each side
ssage in the centre large enough for a man to pass through.
s they are needed the rooms are provided with shelves cov-
n dry branches, on which the worms are placed. When the
y number have been installed here, they are covered with
ats. These mats are not so closely formed as to prevent
ssion of air. Artificial heat is recommended here also.

Touran-Tso, or Round Cocoon Rooms.

oonery represented on p. 342, is highly valued by some. The
first established and the circumference divided into five
pine boards. Five poles are then planted and tied together
, and then surrounded with rush mats. Dry branches are
round against the sides, against the mats where the silk-
e to ascend. When the worms have been placed in, the
rt is surrounded with rush mats, and covered high up with
the form of a cove.



TOUAN-TSO, OR ROUND COCOON ROOM.

CHAN-PO.

Chan-Po.

☞ This cut represents the cocooneries of the districts of *Kia* and *How*, where the best silks of China are said to be produced. This term signifies a frame covered with small protuberances or hillocks. The frames are woven of split bamboo reeds, and placed upon a stage or table, supported on each side by wooden pillars about six feet high. The small elevations are made of rice or wheat straw, cut of equal length and twisted together at the the top; and then placed upright on the frames.

It is necessary to cover the frames with a slight bed of short straw to prevent the worms falling through between the reeds.

At the bottom of this frame chafing-dishes filled with charcoal, are placed four or five feet apart. When the worms are put on the frame only a little fire is necessary to induce them to work, and they will not be seen to climb and move about wasting their silk. As they enter their cocoons the heat must be increased by the addition of burning coal to the chafing-dishes. As the silk is thrown out by the worms, it dries, and immediately hardens; which is the reason why the silk from these districts, so long retains its strength and receives such brilliant dyes, which is never the case, where the worms spin in a damp and chilly atmosphere, as is generally true of most other constructions for spinning. Another spinning frame recognising the same principle, and which is highly spoken of, is shown by the following cut.*

It is taken from a silk painting before referred to, as belonging to Dr. Stebbins. These frames are of bamboo net work, with interstices large enough for the formation of the cocoons.

They are intended to be placed within enclosed cocooneries similar to those described, and present peculiar advantages, as the worms are not suffocated by masses of branches; while the heat and air have free circulation.

The French provide for the spinning of their cocoons a "cabin" of the following description:

Take a round willow basket, which dress with brush wood, putting the wood round two-thirds of the basket, and leaving the other third open for putting in the worms, and to give an opportunity to clear away their litter. Then pull the ends of the wood together at the top, so as not to press too close upon each other, and so tie them with a little twine or pack-thread, to keep them in their place; after which you put a paper cap, pretty large, upon the top of the wood, it having been found that the worms are fond of making their cocoons under a cover of this kind; as it affords an opportunity of attaching some threads of silk to the paper, which enables them to fix their cocoons the more firmly in their place. In putting up the cabins, on the stage erected for this purpose, the two rows of brush-wood at the extremities of the stage are made much thicker than the others, especially for 6 or 8 inches above the stage or shelf, to prevent the ns from getting out at the ends and falling over the stage. In ing up the other two rows, you lay a piece of wood or reed ss the stage for each row; and in putting up the brush-wood you e the first turn to the right and the second to the left; and so rnately, keeping the reed in the middle, which binds all fast. In sing the stage with the brush-wood it is advisable to cover the ars which support it, and to cover also the top of the stage with same, that the worms may find a convenient hiding place where-r they wander. In constructing the cabins great care must be en to put up the brush-wood in such a manner as to allow a pas-e for the worms between the different branches, which however, uld not be too wide; and it is well to make a great number of the nts or buts touch the shelf, because it affords the greater oppor-ity to the worms to mount.

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* The cut referred to here will be inserted with the next communication.—Ed.

Many people at Montauban put roses or sweet smelling flowers on the pillars which support the stage, and in other parts of the m, with a view to sweeten the air.

n forming the arches of the cabins, there is always a little open- at the top of each pillar, occasioned by the curve or top of the cle. Care should be taken to make this opening pretty wide, be-use it has been observed that the worms make choice of this open- to fix themselves in forming their cocoons. The cabins may, in s way, also be made to accommodate a greater number of worms. e most irregular and crooked brush wood will make the best ins. (The scrub oaks growing in many parts of this county uld make fine cabins.) The tops should be intertwined, thus ming as many interstices as possible. (The materials for the ins should be ever ready, that whenever the worms show an incli-ion to mount, you may always have a house to place them in.)

When the worms have commenced their spinning, care must be en not to suffer the cabins to be touched; because, when they in to work, the first operation is to fix many threads of silk to erent branches to support the cocoon, and keep it in a proper se. If, by any means, any of these supports are broken, the rm finds his arrangements deranged, and, becoming at once dis-raged, abandons his cocoon, and throws out his silk at random, erever he goes. Such accidents sometimes occur, by worms rking in the same neighborhood crossing each other, though this not often the case.

t sometimes occurs that worms, apparently as good as any, linger the shelves and refuse to mount, the reason of which seems not derstood. Such worms, however, will generally go to work and n vigorously, if placed in a good position, and become quite live- when exposed to a moderate increase of heat, which it is always isable to have the means of producing.

The spinning worms should be visited with great care and frequen-, that no diseased worm be allowed to remain among the healthy es, to become putrid, and vitiate the atmosphere, which should, ove all things, be pure and well supplied with a free circulation air.

Much care is required that no worms be placed in the cabins till they are thoroughly ripe, which is easily determined by those accustomed to them, as they will refuse eating, commence crawling, and assume a transparent appearance, resembling a newly laid egg. This is peculiarly the appearance of the head and neck.

We must here terminate our views of Chinese silk culture. What has been said has been culled from much matter on the various topics introduced. To include the translation wholly, would have been impracticable; and to extract the sense of such a mass of confused indefinite scrapings has been intolerably tedious.

The *management of the mulberry tree* by the Chinese; their application of *artificial heat;* and the use of *heat* at the time of *spinning*, are subjects deserving our particular consideration.

Further than this, we have no remark to offer, either in commendation or otherwise, of Chinese practices in making silk. Our readers must judge of their value. What may be entirely practicable under their system of labor, may be wholly incompatible with ours. There will be found suggestions, without doubt, which may be turned to good account by American silk producers. We commend the whole to an attentive reading.

[*To be continued in the next No.*]

ART. V.—THE SCIENCE OF HISTORY.

Introduction to the History of Philosophy, by Victor Cousin, Professor of Philosophy, of the Faculty of Literature of Paris. Translated from the French, by Henry Gotfried Linberg. Boston: Hilliard, Gray, Little & Wilkins. 1832.

[CONTINUED.]

For proof of this we have the authority of sacred writ superadded to the reasoning of profane philosophy. The following illustration, though drawn from a source the most familiar of all others in existence, the first and second chapters of Genesis, yet the reading it furnishes of these chapters is so little familiar to the generality of readers that we are tempted to give it in preference to any other illustration we can at this moment think of. We are also further induced to give it, in preference to any other we might select, because it may be the means of commending this philosophy to the credence of the "*faithful*" who will see no truth out of the Bible, and who condemn, first and last, as the invention of the devil, any and every philosophy for which some authority may not be found in its pages.

In the first chapter of Genesis we are told that "in the beginning God created the heavens and the earth." He then created "the grass, the herb yielding seed, and the fruit tree yielding fruit, whose seed is in itself, each after its *kind*." After this, "God made man in his own image; in the image of God created he him: *male and female created he them.*" Here, now, the *kinds* only are created; and these kinds are created *in potentia*, in possibility, as it were; they exist as yet only in idea; are merely ideal; just as a painter might be supposed to create in his mind the outlines of a picture before it is transferred to, actualized upon the canvass. For in the second chapter of Genesis we are told that "these are the *generations* of the heavens and the earth where they were created;" that they were the same *genera*, the *kinds*; and these kinds existed "in the beginning" only in idea, for as yet "*they were without form and void*;" "*and God made every plant of the field before it was in the earth, and every herb of the field before it grew.*" And notwithstanding, in the first chapter, God had already "created man after his own image;" yet, in the second chapter, "*there was not a man to till the ground.*" "And the Lord God *formed* man of the dust of the ground, and breathed into his nostrils the *breath of life*; and *man became a living soul.*" And again, though in the first chapter, He had created man "male and *female*;" yet, in the second chapter, "the Lord God said, It is not good that man should be alone," so he made woman out of a rib which he took from the man, and brought her unto him.

The foregoing example gives us some notion of the metephysics of creation as taught by Moses, who was the greatest philosopher of his day, and who, it must be remembered, learnt his philosophy in the schools of Egypt which laid the foundation for the philosophies of all succeeding ages. The example just cited furnishes also a tolerably fair illustration of the doctrine of "idealism" or "spiritualism," of which we gave some account in our first article, by which we are to understand that all ideas are innate and self-existent in the human mind, and that they force themselves into *actual* existence by means of their own innate vigor and inherent activity—and this, as we understand it, constitute what Cousin calls the *impersonality* of reason, of which we shall learn more hereafter. Hence the reason why Tennemann, in treating of Universal History as a real system, and a true and entire philosophy, has concluded to regard only ideas; because ideas, being fewer in number, are easier classed and systematized than the multifarious acts of mankind; and because these multiform acts, after all, are but indexes by the way-side to point us to the ideas they represent; and because also the acts of mankind would be enigmas quite unitelligible to us but for the light afforded by the ideas which called them into being by which to interpret their meaning. Having once gotten to the bottom of things, and discovered the ideas which reside there as eternal, fixed, immutable, and irresistible causes, we shall then be able to explain the meaning of all the phenomena that are continually transpiring around us, and to reconcile all their apparent differences, conflicts and disorders. These, at a rough estimate, we take to be the reasons why Tennemann proposed such a plan in the treatment of Universal History, and why his suggestion was adopted by Cousin; though there is nothing in the work before us to indicate these to be the true and only reasons. If we are correct in this estimate, it will serve to explain the *modus operandi* of the whole Cartesian philosophy; for it must be remembered, that Descartes, who is the founder of modern philosophy, took his point of departure in *thought*, by an analysis of which he was alone able to account to himself for any thing, even for his own existence. The only alteration which Cousin makes in the plan of Tennemann is this:—he regards not only *ideas*, but the *acts* of mankind as well, in the manner already described, and these he has consecrated under the remarkable appelatives of psychological and historical analysis. We are now prepared to accompany our author in the further development of his method.

Cousin, then, as we have seen, assigns to human nature five fundamental wants, that is, five general ideas which preside over its development, and which we have already enumerated in the order in which, according to him, they manifest themselves externally. These five constituent elements of human nature, he contends, are not fanciful ideas, they are not illusions, they are not immaginary wants arbitrarily assumed by certain speculative minds for the furtherance of certain favorite theories; philosophers have had no more to do with their creation, than mathematicians, astronomers, chemists, and geologists have had to do with creating or imagining the principles and laws of their respective sciences. On the contrary, they are *facts*, stern realities, eternal, indestructible, and irresistible elements which have been *discovered* to lie at the bottom of human nature, to reside in the human mind, and are there to govern and direct all its acts. Taken together, they form the soul of humanity. There are no more elements than those we have named, they exhaust the capacity of human nature; and there are no fewer; they can be neither increased nor diminished; they are simple, indecomposable, and irreducible into each other; it is not possible for human ingenuity or human intelligence to add one more element, or to extract one from those enumerated; once formed, they exist together without the power of destroying each other, and constitute the essence. the eternal foundation of humanity. It belongs to the essence of every thing which is strong to develope itself; and now, having found the constitutional elements of human nature, the next inquiry is:—How do these elements actualize themselves? In what *forms* are they manifested? If they are active, irresistible wants of human nature, they must necessarily be supplied, they must force themselves to be represented. How then are they developed? What are the visible, sensible, *material* representatives of these ideas? That is, what are their products, what are *their acts*, what have they created? Cousin again enumerates these categorically, as follows:

The idea of the *useful* gave birth to industry, to commerce, the mathematical and physical sciences; the idea of the *just* produced the state, government, jurisprudence; the idea of the *beautiful* created art; the idea of the *holy* and *divine* is represented by religion, the ritual of worship, the church; and lastly, the idea of the *true* minifests itself in philosophy, which accounts for, explains and verifies all the others. "Add all these together, multiply ages, fertilize these feeble germs by the accumulated labors of generations, and the result will be all which at this moment exists." The development, progress, and growth of all these elements, of all these wants of our common nature, with all their combinations, modifications and natural relations, constitute history, which is the visible image of the human mind.

"In universal life," says Cousin, "nothing perishes; every thing is metamorphosed and appears anew; mechanics and physics reappear in chemistry, and chemistry in vegitable physiology, which again finds a place in the economy of animal nature. All these antecedents, all these degrees of life, are also in humanity." According to his doctrine, humanity is the resume, of all external nature, with consciousness, that is, with a knowledge of all these things and of itself superadded. There is nothing in the whole external world but what re-appears in man, (subject of course to different conditions) in the same manner as the whole world and the universe reflects God. The interior movement of the energies of the world, in the necessary progress of their development, from degree to degree, from kingdom to kingdom, produces that wondrous being whose fundamental attribute is consciousness; and in this consciousness are to be found precisely the same elements which, under certain modifications, are also to be found in nature, and which reside also in God himself. In order that there may be no mistake on this point, M. Cousin is very copious and explicit in relation to it throughout the whole course of his lectures. He does not consider humanity as the effect, of which nature is the cause. Nature did not produce humanity; and yet there is nothing in nature but what re-appears in humanity. Humanity is a separate and independent creation; but it was created after the same universal type and eternal model. Nature is the basis of humanity. Nature is the column, of which humanity is the capital, the crowning apex; and between nature and man there evidently exists a harmonious relation of general characters and general laws.

Proceeding thus by the rule of induction, which rests upon the supposition that the laws of nature are constant to themselves, he advances, as we have seen, from nature to humanity. As there is nothing in nature but what reappears in humanity, so also there is nothing in humanity but what reappears in history; for the induction which he makes from humanity to history, rests upon one only supposition, viz: that of the constancy of the laws of humanity. "If human nature is constant to itself, then that which occurs in its psychological development, will also occur in its historical development;—the one is the measure of the other." History, then, is the development of all the essential elements of humanity; that is, the development of these elements are the acts, the deeds of humanity, and of these, history takes cognizance. But these acts, these deeds of humanity, are but the realizations, the symbols, the visible images and outward forms of the *ideas* which reside in human intelligence; hence, whatever enters into human history necessarily pre-exists in the human intelligence. But all the essential elements of humanity, all the ideas of the human intelligence, subject to different conditions, pre-exist also in nature; and their development from out of both, that is, in the acts and deeds of both, are governed by precisely the same laws, modified according to their different conditions; hence all the facts of human history must necessarily be capable of a scientific arrangement, analogous to our knowledge of the laws of nature in general. But this is not the only inference deducible from M. Cousin's premises; and fortunate would it be for the cause of science and philosophy, if the other, which we are about to mention, were equally innocent and legitimate.

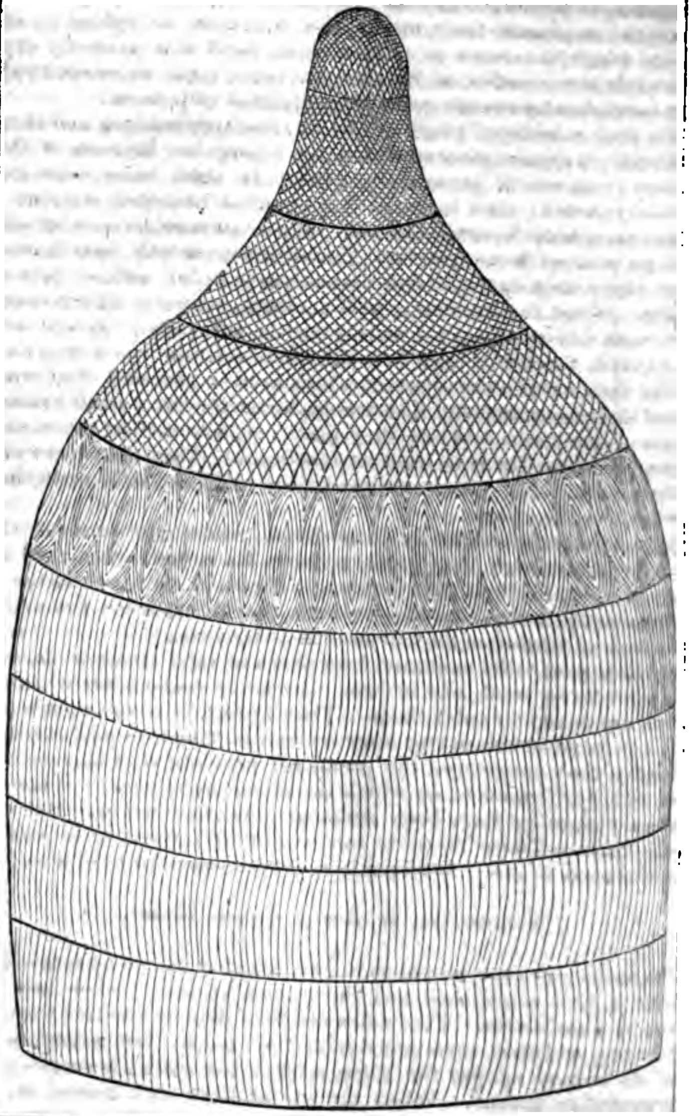
If "the universe is nothing but God expressed," and "man is the universe in miniature," that is, if "all the momenta of the divine essence pass into the world, and return into the consciousness of man," then history, which is the visible image of that consciousness, is the last counter-stroke of the Divine Action. As humanity is the resume of the universe, which is a reflection of God; and as the laws of nature and the laws of humanity are analogous, that is, their elements, which are the same with different conditions only, are developed under the government of laws exactly analogous; and as there is nothing in nature and humanity but what pre-exists in God, and is reproduced alternately in them both; then it follows that, in the last analysis, the history of humanity is also the history of nature, and also the history of God himself.

It is by this process of reasoning that M. Cousin aims to penetrate into the divine essence, and to arrive at a complete knowledge of God. He repudiates utterly the common and vulgar opinion of God's incomprehensibility. There are those, he says, who would have him incomprehensible. There are men, reasonable beings, whose vocation it is to comprehend, and who believe in the existence of God, but who will believe in it only under the express condition that this existence is incomprehensible. As for him, however, he believes, so little is God incomprehensible, that his nature is constituted by *ideas*—by those ideas, whose nature it is to be intelligible—that God, the substance of ideas, is essentially intelligent, and essentially intelligible. In order to arrive at this sublime species of knowledge, we have but to inquire and find out what are the elements of human reason, that is, the ideas which preside over the development of human reason. That which we discover to be true in reason, humanly considered, subsists in reason in itself, reason *per se;* that which forms the foundation of our reason, forms the foundation of eternal reason, and this eternal reason is God. "O, Reason, Reason," exclaims Fenelon, "art not thou He whom I seek?" Now, ideas are not the reflection of things, but things are the reflection of ideas. So far, indeed, are ideas from being representative, that they alone are constituent, and all the visible works of creation are but reflections, representatives, symbols of ideas; hence, as we have already stated, whatever appears in human history, must appear there as the representatives, the actualizations, the material forms of the ideas which constitute human reason. And as human reason is but a reflex of the Divine reason, hence, whenever, by the joint aid of history and philosophy, we shall have arrived at a knowledge of the one, we will at the same time have attained to the knowledge of the other also. Such is the sum and substance of M. Cousin's demonstration on this difficult subject; and however mathematical and conclusive this solution of the problem may seem to himself and to others, on our part we deem it wholly unphilosophical and insufficient, and as such must beg leave to enter here our protest, in the words and figures following, to wit:

Some distinction must be made between God and Providence.

The providence of God alone interests us, and is intelligible to us, and comes within the scope of our comprehension; that is, the providence of God so far as concerns nature and human beings. God, considered in his perpetual action on the world and on humanity, is Providence. It is only in this capacity, only as Providence, we can know God. We can know him only as he is manifested in us and around us, and only so far as we know ourselves and the operations of surrounding nature, can we know him; whatever other ulterior elements he may possess, are beyond our reach and comprehension, because we have nothing else by which to reach and to comprehend him. We ascend to God upon the ladder, as it were, formed of the component elements of human thought; when we have exhausted that, when we have reached the last round of this ladder, we have then reached the Ultima Thule of our capacity to mount higher, and God still recedes from our vision far into his own impenetrable infinity, and there mocks at that arrogant philosophy which vainly attempts to grasp and to analyse him. But that knowledge which is within our reach should suffice, and must necessarily suffice, for man; we have no need to know more of God than in so far as he is connected with us and with the world we inhabit; when we shall have known all this, when we shall have known all that our capacity allows us to know, we shall have achieved much. If there shall be found in human nature a *positive want* to go beyond this knowledge, and to penetrate into the infinity of God, and to know him in all his transcendent glory, then it will not only be legitimate, it will not only be possible, for man to achieve this knowledge, but he will achieve it; for the want, like all the other positive wants of human nature, will be sufficient for itself, will suffice for its own accomplishment. But we apprehend that, upon close inspection, no such want will be found to exist there. The whole life of humanity is not more than sufficient to exhaust the knowledge of itself; and until that knowledge is exhausted, it will be the whole business of its life to know itself, and this knowledge must necessarily limit its knowledge of God; for so long as any thing of itself remains to be known, it cannot quit the pursuit of that to seek something beyond, for that would be to abandon the means.

The appellations of pantheism and fatality have not unfrequently been bestowed upon M. Cousin's system of philosophy. With some show of resentment, however, he affects to deny the soft impeachment, and throws back, in turn, that amiable accusation upon those who advance it, contending that the true God is on his side. Who or what he understands this true God to be, will more fully reveal itself as we progress further into the heart of his system. The reader cannot fail to observe that our author is extremely solicitous not to shock the prejudices of any one, but rather to conciliate all parties, and to reconcile all differences of opinion, by effecting a general fusion of them all in an amicable association in the capacious bosom of his all-embracing philosophy. For this purpose he is obliged more frequently than comports with ease or dignity, to "define his position," an attitude which, for individual comfort or for prospects of success, is pretty well understood in this country.



TOUAN-TSO, OR ROUND COCOON ROOM.

that it is necessary and unavoidable." God creates therfore from necessity, and because he cannot help but create—he creates from the inward necessity of his nature to do so. He is cause, absolute cause, and that which constitutes him a cause constitutes him a creator, for to cause is to create. He is therefore not free to choose whether he will create or not. If he were free to do so, and were to choose not to create, he would thereby dethrone himself, abdicate his power; nay, he would uncreate himself, inasmuch as he lives only by creating—there would hence be no God, because no universe no creation; for the mind cannot conceive of God without a world; a God without a world must be regarded by man, as if he were not; he would thus be a "*Roi Faineant*," a king Do-Nothing. "God is in the universe, as the cause is in the effect;" he enters into his creations with all his characteristics and attributes; and the creatures partake of all the characteristics and attributes of the creator; therefore the universe is but a reflection of God.

This can by no means be the true state of the case; and yet that such an inference is legitimately deducible from Cousin's system of philosophy, we think the reader will agree with us in the end, abundant evidence can be furnished from the pages of the work that stands at the head of this article. It is Spinoza, more than any other philosopher, whose genius has given to pantheism in modern times its highest form and most perfect development. He demonstrated the different propositions upon which he relies to establish his system of "*pure*" pantheism, with the most exact method, according to geometrical principles; and with manly boldness and a calm indifference he follows whithersoever his demonstrations lead, without any of that timid, mawkish and deprecatory spirit, which so often makes our author shrink from extreme consequences, and causes him to modify conclusions and endeavor to conciliate popular prejudices at the risk of consistency. It is the taint of pantheism in his doctrines which, in our opinion, more than any thing else, vitiates our authors whole system of philosophy; and now in order to ascertain clearly whether he be justly amenable to this charge, it will be necessary to state the pantheistic system established by Spinoza, and employed as test by which to judge M. Cousin's eclecticism. The narrow limits to which we are confined forbid us to give even an outline of the demonstrative processes by which Spinoza rears his stately fabric; all we can do is simply to announce the results at which his demonstrations arrive; and it will be enough for our purpose if we can do this in a manner sufficiently clear to enable the reader to comprehend it.

Jouffroy, one of the ablest of Cousin's disciples, has given a more luminous exposition of the grand and obscure doctrines of the system, as unfolded by Spinoza, than any of the expounders of that philosopher with whom we are acquainted. Such indeed is the obscurity of Spinoza's doctrines, as Jouffroy justly remarks, that very few students are able to comprehend them, though all speak of them. The difficulty of understanding his writings arises mainly from the geometrical method employed, which in this case, as in all cases where the attempt is made to apply mathematical forms of reasoning to *subjects for which they* are unsuited, serves only to render the exposition complicated and obscure. Should the reader desire to know something more of the method by which Spinoza demonstrates his system of pantheism, we beg leave to refer him to a work of Jouffroy, lately translated into English by William H. Channing, entitled "Introduction to Ethics." And we also beg leave at the same time to acknowledge our own indebtedness to the Frenchman for what little we know of the philosophy of the renowned glass-cutter of Amsterdam.

Spinoza first proves the *unity* of God, or the unity of substance; that is, that there is but *one* being, whose essence is existence. The unity of substance being proved, he demonstrates successively that it is *necessary* and *infinite*. Unity, necessity, and infinity, of substance being demonstrated, he proves yet further that Being, or substance, is *eternal*; *independent*; and finally, that it is *simple* and *indevisible*. Such a Being according to Spinoza, is God, in the only sense we can concieve of him; and this idea is the fundamental one of his system. "God being the only substance, and comprehending in himself all existence, it follows that nothing exists except through him and in him; or, in other words, that he is the inherent cause of all, or rather the substance of all which has being. There is not, and cannot be, then more than one being, which is God, and the universe is only an infinitely varied manifestation of the infinite attributes of this being." Spinoza next inquires as to the manner in which this necessary being, whose essence is existence, develops himself; and proves that, being himself necessary, he can only act through and by the necessary laws of his nature, and consequently, that he cannot be *free* in the sense in which we understand that word. He ridicules the idea which we form of God, as of a being, who acts for a certain end, and because he *wills* to accomplish that end, but who could yet prefer another, and, consequently, act in another way. He affirms that it inevitably follows from the necessary nature of such a being as he has depicted, that all the acts and ideas, which are successively developed in him, arise *necessarily*; so that nothing which originates from him is produced by *free choice*, and the word *will*, therefore, in its common acceptation, cannot be attributed to him. "It follows, from this view, that in God there can be neither moral good nor evil. For moral good and evil imply a choice between different courses of conduct; and, since God acts through the necessary laws of his nature, he cannot but do what he actually does; cannot, consequently, act with a view to a certain end, nor with a purpose to accomplish it." "God *wills* not; acts not from design; has no desire, passion, nor disposition." "If God's nature is developed thus necessarily, and if nothing exists which does not spring from him, it follows that nothing which is accidental can exist or occur;" but that in the words of Pope, whatever is, is right, and all's for the best; in short, that there is no such thing as accident. We call that *contingent* and *accidental*, says Spinoza, of which we cannot comprehend the *necessity*; but all which does happen, must happen and happen too exactly in that way. From the same principles also, it appears the world is eternal, and that the idea of creation is chimerical; for that which at any time did not exist, could never have begun to exist, and there can be nothing beside the being who is one and infinite.

Such is a concise outline of some of the fundamental principles of the pantheistic fabric erected by Spinoza. When viewed in its completeness and integrity, it constitutes the most vast, the most absolute, and the most rigorous system of pantheism which the [illegible] philosophy has ever known. We have [illegible] how-ever, only so much of its principles as will serve to [illegible] of Cousin's system of philosophy. It cannot be doubted that there is a very striking family likeness between some portions of Cousin's doctrines already set forth, and those of Spinoza as sketched above. It is believed that this resemblance will be still more apparent as we advance, and as some of the more lurking and subtle of his principles are disengaged and brought into full view, and their legitimate inferences detached. When we once admit a fact, a long cherished and well understood popular belief, or vulgar prejudice, or ignorant superstition, or by whatever other epithet it may be denounced, which asserts the personality of God, there seems to us to be no resting place for the mind out of the lap of pantheism; pantheism, in some shape or other, is the only substitute for the personality of God, as expounded in the Bible. It is a specific character of pantheism, that it always leads, by a strict necessity, to the denial of human liberty, and consequently to the belief that a law of obligation is impossible. In the view we have given of it, it denies divine as well as human liberty.

God undoubtedly enters into the universe through the intervention of those fixed and necessary laws which govern all its developments, and is therefore continually present in all the works of nature and in all the wants of history, in the shape of those instinctive wants which are continually manifesting themselves in acts, in external forms, and visible images. But he does not expend his whole essence, he does not exhaust all his powers in his creations; the interior principle of causation, while developing itself in acts, retains that which constitutes it a principle and a cause, and so far from being absorbed in its effects, is not in the slightest degree diminished or changed thereby. Nor does he limit his action upon humanity, by itself, in its instinctive operations. This would be to declare, with Vico, that humanity is divine, a deity, and its own creator—that it suffices for itself, is its own work, its own creation. The infinity of freedom is an attribute of God: to say that he acts upon the universe only through its fundamental, permanent, and necessary laws, would be to limit his freedom of action, and to make him a finite being; that is, to restrain his action by the laws or nature of the creature. While God unquestionably intervenes in human affairs in a general way, that is, through the necessary and invariable laws of nature and of humanity, he is at the same time a free, sovereign power, distinct from humanity and from the universe, above all, controlling all, arresting, changing, modifying his own acts, graciously supplying humanity from time to time with new strength and materials to work with, and giving its action a new direction, or an additional force, as may be required for the greatest good of the race. He intervenes, therefore, specially as well as generally. This proposition, to our mind at least, requires no demonstration than the simple acknowledgment of the infi

God's freedom. It is necessary that the laws of nature should be fixed and determinate, otherwise it would be impossible for man to foresee the recurrence of any of those natural phenomena which so much affect his interests and well-being. But we can see in this idea of a special providence, nothing that conflicts with any sound philosophical notion that may be entertained with regard to the character of order, such as its permanence, regularity, and necessity, or with the regular development and uninterrupted progress of a preconceived and prearranged plan; a plan which, in embryo, like an acorn, has within itself the germ and capacity of perfecting itself. The doctrine that "a Paul may plant and an Apollos may water, but God alone can give the increase," is sound philosophy. Nor does the idea of a special providence conflict with the idea of God's *general providence*, (which, indeed, is but another and more definite mode of stating the preceding proposition,) because God is himself the source of order, of infinite and eternal order; and whether he act generally or specially, he acts always in obedience to the divine principle of order which is in him; hence his special acts cannot contradict his general laws, but, besides being in correspondence with them, must aid and assist them.

But in fact we deem the almost interminable discussion that has been maintained on this subject, as having been more fruitful of strife than of any useful result; for it is immensely difficult, if indeed not impossible, to draw a well defined line of demarcation between the divine action and the human, and to say with accuracy and certainty when and where God intervenes in human affairs *specially*, that is, as an independent power out of humanity, and without reference to those inherent and necessary laws which reside in universal nature, and therefore *apparently* containing them: or *generally*, that is, by humanity itself, in its instinctive operations, and by means of natural laws. Much, therefore, that has been confidently asserted in the respect of certain men and certain nations, or of certain transactions, that enjoy the exclusive honor of being denominated "*providential*," and to have been produced by an arbitrary or an independent exercise of God's creative power, without reference to, if not in contravention of, those universal natural laws, which otherwise might have been deemed competent to their production—much, we say, of this sort of declamation may, after all, admit of more or less qualification; and we apprehend, if closely looked into, a great deal of their sublime specialities would fade into mere common place generalities, and they would be found to have been *legitimate effects from natural causes*, and to have sprung from the same general and universal laws which rule over the birth of other more ordinary men, nations, and events.

In our next article, we will introduce to the reader another of the great, leading, fundamental principles of our author, to wit: the reduction of the elements of human thought, in imitation of the famous categories of Aristotle and Kant. These elements, which, according to Aristotle, were very numerous, and which were even multiplied by Kant, are reduced by Cousin to a very simple formula, composed of three parts, which constitute a kind of trinity, of which he makes immense use, and by means of which he undertakes to explain all the past events of history, and even in some degree to anticipate or foretell the future history of mankind. After this principle shall have been fairly stated, nothing more will remain for us to do but to bring together the different principles enumerated in these articles, and to draw thence such deductions as may be legitimately extracted from them. As in physics, a speculative mistake is abandoned when contradicted by facts which strike the senses; or as in mathematics, an absurd or inconsistent conclusion is admitted as a demonstrative proof of a faulty hypothesis; so in metaphysics, those principles must be pronounced to be unsound which will justify deductions and inferences which the common sense, the common observation, and the common experience of mankind declare at once to be absurd and inconsistent. It is by this test that M. Cousin's Philosophy must stand or fall; and this is the test which we mean to apply in the sequel.

(*To be continued.*)

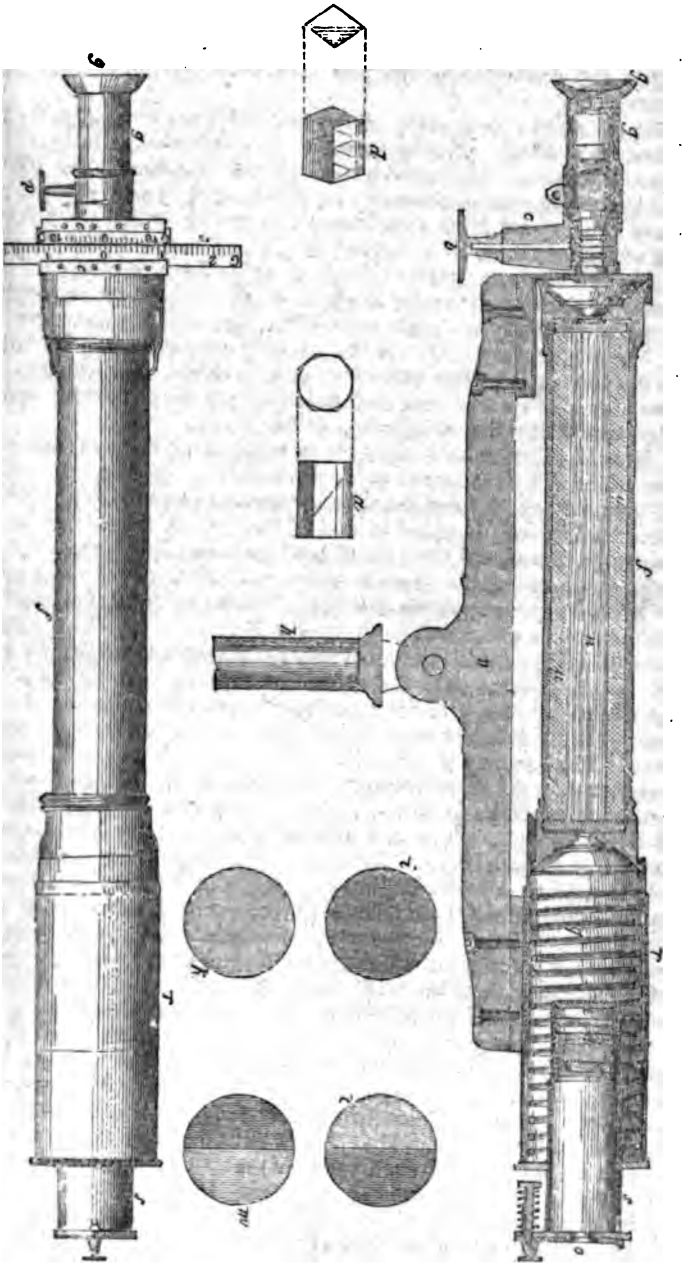
ART. VI.—SOLEIL'S SACCHAROMETER.

A beautiful instrument for ascertaining the quantity of crystalisable sugar in any saccharine solution, was invented in Paris, in the year 1846, by M. Soleil, an eminent optician and mathematical instrument maker. It is now used by numerous refiners in France, who employ it to ascertain the value of the raw sugar offered to them for sale, and is of such unfailing accuracy and easy use that it will soon be as well known to the manufacturer as the ordinary pesè-sirop of Beaumé. But although this instrument be one requiring only a moderate degree of intelligence and a few hours study to make its practical application familiar, the principles on which it is constructed are not so easily apprehended, and require a somewhat more than superficial acquaintance with the discoveries in optics made by modern science. It is the object of this paper to give a description of the instrument, of the manner of using it, and if possible an explanation of the principles on which it is constructed, that will be intelligible to the general reader.

There is an extraordinary property of a ray of light discovered by M. Malus in 1808 which is termed polarisation. Light is said to be polarised when, by being once reflected or refracted, it is rendered incapable of being again reflected or refracted at certain angles. We all know that in general a ray of light after being reflected from any surface, as for instance, a pane of plate-glass, may be reflected a second time from another surface, and will also pass freely through transparent bodies. But if the ray of light be reflected from a pane of plate-glass at an angle of 57° it cannot be reflected from the surface of another pane of glass in certain positions, although it will be completely reflected by the second pane in other positions. A ray thus reflected at an angle of 57° also loses the property of passing through transparent bodies in certain positions, although it will freely penetrate the same bodies in others. Such rays of light are said to be polarised.

It has also been discovered that the greater number of animal and vegetable substances, such as gums, jellies, resins, &c., possess the property of doubling the image or appearance of an object when seen through them in certain directions, because the ray of light falling upon them is refracted into two pencils, more or less separated, according to the nature of the body and the direction of the incident ray. Each of these pencils is polarised. *Iceland spac* possesses this property of double refraction in an eminent degree, as may be seen by pasting a piece of paper with a hole in it on the side of the spac farthest from the eye; the hole will appear double in looking through the spac. It has further been observed that when a ray of light is thus divided into two polarised rays it exhibits properties which are symmetrical both to the right and left of the plane of reflection, but that in crystallised *quartz*, this symmetry is destroyed, and that the plane of the polarisation deviates either to the right or left of the observer, by an angle proportional to the thickness of the plate of quartz. This is called circular polarisation. Mr. Biot discovered that a solution of *cane sugar*, as well as many other liquids, possessed the same properties of circular polarisation as crystallised quartz—but the quartz possesses this remarkable quality, that in some crystals the rotation is from right to left, and in others from left to right, and if two of these opposing crystals of equal thickness be interposed between the ray of light and the observer, they counteract mutually their opposing influences, and the circular polarisation ceases to exist. The law of circular polarisation in liquids such as solutions of cane sugar was shown by Mr. Biot to be, that the angle of deviation is proportioned to the length of the column of liquid, the density of the liquid, and the proportion of active matter. It was by the application of the optical principles above stated in a very succinct form, that Mr. Biot constructed an instrument which showed the quantity of crystallisable sugar in a syrup with the same accuracy as the thermometer indicates temperature, or the barometer atmospheric pressure; but the instrument of his invention, although available for the analysis of the chemist, required for its use an apartment specially prepared for the purpose by excluding all light except the ray that fell on the instrument, and the results could only be obtained by mathematical calculations, not always understood by the manufacturer who might desire to employ it. M. Soleil has succeeded in inventing a different instrument, which although depending on the same principles, may be used at all times and in all situations, without any necessity for calculation, and which can be practically applied by persons ignorant of the theory by which he was guided, in the same manner as the thermometer and barometer are daily used by persons unacquainted with the physical laws which influence the rise or fall of the mercury in their columns.

The annexed plate shows the Saccharometer. Letter *d* is the prism of *Iceland spac*, possessing the power of double refraction as above stated, which polarises the light transmitted through the instrument in the direction of its axis. This prism is termed the polariser.


b
g
d
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T
r
l
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o

A second prism also doubly refracting, placed at the point seen separately at letter *a*, and called the analyser, causes two of the opening *o* to be seen: this can be turned at will in it and in any desired direction, and then fixed in its position screw *p*.

At the point *e* is a plate of crystallised quartz composed pieces possessing opposing powers of circular polarisation, equal thickness. On looking through the instrument the e the preceding arrangement of the prisms and quartz is suc show two colored disks, (see letters *i k*) one violet and the ot low, each separated by a vertical line, which is the line of sep of the two kinds of quartz. Each of these disks presents th shade of color on its entire surface, when the analyser is pl zero, as shown by the scale seen in the figure of the instrum

The slightest movement of the analyser makes a perceptible in the tints, and as this movement acts in contrary direction two plates of quartz, the succession of colors is inverse, slightest change thus produces a double effect.

Now if in the tube *n*, syrup is introduced in front of the the effect will be the same as is produced by changing the of the analyser, for as cane sugar possesses a right circular tion, its influence is added to that of the crystal of quartz p the same power, and their combined influence overpowers th crystal possessing the opposite property. If the syrup is a of *glucose*, or uncrystallisable sugar, whose circular polari left, a similar effect will be produced in favor of the left p quartz. The result in either case is that the disks no longe the same general shade of color, but that in each the tw separated by the vertical lines possess distinct colors. therefore to measure the rotary power of the column of would be necessary to place before it a plate of quartz havi rotation of a thickness requisite to neutralise the effect of th and thus would be produced a *couple* or *pair* of forces, of w active elements, sugar and quartz, would exactly compen influence of each other. But it would be difficult and even ble to procure a series of plates of quartz of different thick sufficiently numerous to enable the observer always to fin the exact thickness necessary to compensate the rotary po saccharine solution at all degrees of saturation; and it is this necessity that M. Soleil invented that part of the in which he calls the compensator. It is fixed at the point composed of two oblong prisms of the same angle cut out of plate of quartz: these prisms super-posed the base of eac summit of the other, recompose a plate of which the surf parallel. Each of these prisms is fixed in a frame runn groove, so that they can slide before each other by means of which moves both in such manner that the thickness of pound plate can be varied at pleasure. In front of this c plate is fixed another of the same thickness but made of piece, and possessing the contrary rotary power. These tw one simple and the other compound, therefore create no p

, their reciprocal influences being mutually compensated, and s position the compensator marks zero. Now if the screw that s the compound plate be turned so as to make the two thinnest cover each other, its thickness being diminished the power of imple plate becomes predominant, but by an inverse motion of crew the compound plate becomes the thickest and overcomes nfluence of the simple plate. On the frame of one of these s is engraved a scale beginning at zero in the middle and divided degrees to the right and left for indicating the two deviations of rised rays; and on the other is engraved a scale called a vernier ndicating tenths of the first scale. The first of these two scales ates tens, and the second units, the two combined showing the t number of degrees marked by the instrument when an obser-n has been made. At the point *g* is a lens fixed to the analyser, of which the focal distance may be lengthened or shortened at sure to suit the eye of any observer.

efore using the instrument the observer should first satisfy him-that it is in perfect order, for which purpose he proceeds as fol-. He turns the screw of the compensator until the zero of the scales coincide perfectly. He then places a tube of water in the ument and looks into it, lengthening or shortening the focal dis-e of the lens *g* until he can see plainly and distinctly the black cal line that divides the two disks that are presented to his . Finally he turns round the analyser in its socket until these present on their entire surface a uniform color: as soon as this is attained, he screws the analyser tight enough to fix it in its ion.

e apparatus being now ready for use, the water is poured out e tube and the syrup which is to be examined replaces it. So as this column of syrup is interposed between the compensator he polariser, the appearance of the disks is changed. The right of each disk presents a different color from the left half, because rotary power of the sugar has caused the pencil of polarised to deviate to the right, if the sugar is crystallisable or to the if it be glucose or uncrystallisable sugar. All that the observer o do, is then to turn the screw of the compensator until it shall re the identity of tint throughout the disk—the number of de-maked on the scale at once shows the extent of the rotary power e sugar, each degree on the scale corresponding to a thickness of nillimeter* in the compound plate of quartz that forms the com-ator. So that if the scale marks 60°, the rotary power of the arine solution is equivalent to that of a plate of quartz of sixty meters in thickness.

e use of the instrument itself then consists simply in placing p in a tube and turning a screw until the image seen on looking gh it, is of an uniform color. Nothing can be more simple than but it is also necessary to ascertain what quantity of crystalliz-sugar is equivalent to the rotary power of the quartz as shown e scale, so as to enable the observer at all times, and without the aid of calculation, to say precisely what quantity of sugar is really contained in the solution submitted to test.

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* The millimeter is 0.03937 inch.

To ascertain this point, a series of remarks and experiments were conducted with great pains and care by M. Cluget and communicated by him to the society for the encouragement of national manufactures at Paris, in its session of the 14th of October, 1846, which I shall endeavor to condense within as limited a space as is compatible with the desire to render the subject perfectly intelligible.

This chemist commences by observing that although in theory the polarisation of light constitutes one of the deepest and most abstract branches of the science of optics, the appreciation of its effects considered exclusively in its practical application Soleil's Saccharometer is nevertheless of the greatest simplicity, and he then proceeds to describe the mode of manifestation for the different species of sugar.

Let us commence by supposing that we desire to ascertain the quantity of crystallisable sugar contained in a substance which we know beforehand to contain no other species of sugar, such as cane juice when not injured by frost, heat, fermentation or other similar causes. The juice is put into a matrass (or white glass bottle with a long neck,) which is filled up to a mark indicating a capacity of 100 cubic centimeters, and to this juice is added ten cubic centimeters of subacetate of lead which fills the matrass up to a line marked 110 c. c. The liquid is then slightly shaken and under the influence of the subacetate of lead is completely defecated in two or three minutes: it is passed through a paper filter and poured into a tube twenty-two centimeters in length; this tube is placed in the instrument and an observation taken in the manner above mentioned, which will show the number of degrees of deviation effected on the polarised light in its passage through the instrument. This number of degrees multiplied by 16.471 and divided by 10, gives the weight in grammes and centigrammes* of sugar contained in a litre† of the liquid.

There are tables however which accompany the instrument and dispense with the necessity of calculation, so that by merely looking at the table we find marked opposite the number of degrees of deviation, the proportion of sugar in the liquid.

The reason for multiplying by the number 16.471 is this. Experiment shows this to be the quantity in grammes and milligrammes of sugar perfectly pure and dry, a pure sugar candy of which a solution carried to a volume of 100 cubic centimeters will determine a right deviation of 100° in the saccharometer when observed through a tube of 20 centimeters in length. Now as the action of saccharine solutions or polarised light is always in proportion to the quantity of sugar contained in them, or in other words the number of active particles of sugar interposed between the ray and the eye, it is evident that the number of degrees of deviation multiplied by this number 16.471 and divided by 10 will give the quantity of sugar per litre in the liquid subjected to examination, the litre being equal to a cubic decimeter. The table used in the above example is 22 centimeters, one-tenth being added to its length, to compensate for the additional dilution of the liquid resulting from adding to it one-tenth of its volume in subacetate of lead for defecation.

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* The gramme is 15.438 grains troy.

† The litre is 1.760773 pint.

If subacetate of lead cannot be readily procured the defecation can be as easily and efficiently operated by adding 5 cubic centimeters of a solution of isinglass and an equal quantity of alcohol.

If instead of a liquid we desire to test a raw sugar or molasses, the process is somewhat different, because of the coloring matter which would prevent the ray of light from passing through it when in solution, with sufficient distinctness to enable the observer to obtain a clear view of the effect produced. The result is however more directly obtained, because as in this case the observation is to be made by comparing the effect which determined weights of these substances exercise on polarised light as compared with that created by equal weights of pure sugar. The number of degrees marked on the scale when the observation is made indicates the exact per centage of crystallisable sugar in the substance examined, without further calculation or reference to tables.

The most convenient mode of preparing, defecating and discoloring brown sugars or molasses so as to render them suitable for observation in the saccharometer is as follows:

A quantity sufficient to occupy a volume of 200 or 300 cubic centimeters is procured, and is placed in a matrass, guaged so as to contain exactly one, two or three hundred centimeters. The necessary quantity of sugar or molasses according to the capacity of the matrass, is then introduced into it and is dissolved by a quantity of water which is poured into the matrass until it reaches exactly the mark of the guage, if the sugar is white and clear enough to be observed without defecation: if not, a space of about 20 centimeters must be left and filled up with the defecating agent, whether that agent be subacetate of lead or the mixture of isinglass and alcohol. The whole is then shaken up and thrown on a filter. If the liquid when filtered is still too darkly colored to admit of an observation it must be discolored by passing it through bone black. The discolored syrup is then placed in the tube and the instrument, being used in the manner above described, the exact quantity of crystallisable sugar is ascertained.

The method above indicated is all that is required for ascertaining the quantity of crystallisable sugar in the raw material obtained from the *cane*. But it frequently happens that it is desirable to ascertain the quantity really existing in saccharine solutions containing left polarising sugar or foreign substances also possessing polarising power, and I shall now proceed to detail the process employed by M. Clurget for analysing such solutions, although this is rather a matter of curious inquiry than of practical utility for sugar refiners in this country. In order to disengage from the total amount of deviation that which is attributable to the crystallisable sugar alone, it is necessary to convert by an acid the whole mass of sugar into left polarising sugar. In this operation the temperature must be carefully noted, for it exercises a powerful influence on saccharine solutions possessing left polarising power. The laws which govern this influence have been determined by M. Cluget, although the fact of its existence was first pointed out by M. Mitscherlich, of Berlin. A table showing the amount of this influence for each degree of the ordinary temperature of the atmosphere accompanies the instrument.

In order to render facile and exact the observations, a special tube for acidulated solutions is furnished: this tube is provided with a verticle tubulare in which is plunged a thermometer whose bulb penetrates into the solution. The liquid is poured into a matrass marked so as to designate capacities of 50 and 55 cubic centimeters. The vessel is filled up to the first mark with the liquid, and is then filled up to the second mark with pure and concentrated hydrochloric acid. The whole is shaken, a thermometer is placed in it, and the matrass thus arranged, is heated in a hot-water bath to 68°c. and then plunged into cold water to bring it back to the ambient temperature. The liquid is then filtered in order to disengage any chloride of lead produced by the action on the hydrochloric acid of any excess of the sub-acetate of lead employed in the defecation. The solution is then observed in the saccharometer and its left deviation is noted: to this number must be added one-tenth to compensate for the dilution occasioned by the addition of the acid; the total is added to the number of degrees of right polarisation ascertained prior to the acidulation, and by looking at the table in the column of temperature at which the observation is made for the number which approaches the nearest the sum total of the above additions then will be found indicated in the last column to the right, the number of grammes of sugar contained in a litre of the solution.

In conclusion, I will state that if any of your readers should desire to inspect the instrument personally, it will give me pleasure to afford them an opportunity of so doing, and to explain by showing it in actual operation, whatever may be found to be imperfectly described in the hasty sketch above given.

We take from the "Scientific American" the following remarks upon the Turpentine business in North Carolina and Georgia:

In making turpentine a medium sized pine tree, with large top, furnishes the turpentine best. In North Carolina, however, trees of only eight or nine inches diameter are often selected. The tree is tapped for its sap in the months of December, January and February. The first turpentine which flows is called *virgin* turpentine, and care is taken to preserve the pure white color which is natural to it—rosin made from the virgin turpentine is transparent. The sap is distilled like malt and the result is turpentine and rosin and tar. More turpentine is now made in North Carolina and Georgia than in all the rest of the world put together, and the distilation is conducted in the forest, saving all unnecessary transportation of refuse material. Twenty years ago, there was more spirits of turpentine distilled in Europe than in the United States, but the tide has now turned and Europe gets turpentine from America.

AGRICULTURE AND MANUFACTURES SOUTH AND WEST.

I.—DEPTH OF PLANTING SEEDS.

B. De Bow, Esq.,

r *Sir*:—Your zeal and efforts in behalf of agriculture, induce me to send
ie result of experiments which, I believe, will interest cultivators of the
Fully aware that changes will not be hastily adopted by the planting com-
y, yet the desire to do good urges me to appear before your readers, as a
cal farmer. Each individual thinks his knowledge is ample, while he is
ed to treat with levity, observations which point to new modes of planting,
ture.

poleon said the world was governed by epithets; and how true! The name
orist, of book-farmer, has deterred many from improving their minds, and
condition in life. The name rebel, has consigned many a true heart to
iny; the name tory, has doomed many an honest and faithful man to as
an end. The experience of the past proves that Napoleon was right, and
e so to the end of time. Were no one to risk abuse, nor propose anything
hat would be received as orthodox, then would improvement cease. Would
riters be content to labor merely for the present, or having written, destroy
at did not please the mass, such men as Bacon, Milton, Burke, and others
l not have poured instruction into the popular mind.

nvinced that the mass do not sanction experiments which expose their
shed practices, I would not have hazarded opinions so opposite to the old
n, but for the kind attention of the publishers of the German works, by
singault and Bruger; of the Messrs. Appleton, and the Rev. E. G. Smith—to
whom I tender many thanks, and heartily recommend their works, for sale
B. Steel & Co., of New Orleans. I received these works in 1845, but had,
rious experiments, previously arrived at the conclusion, that we lost time
rain in too deep planting; that the prevailing practice was wrong, and de-
ntal to our best interests. I have so said repeatedly, and have generally
net with very strong objections. If these tanslations of Boussingault, Bruger,
ther Continental writers, were read as freely as the last political quarrel, I
l cease, and only say their experience is corroborated here.

ase understand me. I offer nothing not heretofore advanced by able practi-
lanters, nor anything new; but I beg to call to the attention of all planters,
they have seen, and can know by experiment. To some it may be new, but
have not paid attention to it; but many will at once see there is truth, and
n too, in the facts. I will rely mainly on the experiments of others, for the
le reason,—"a prophet is not without honor, even in his own country,"—not
ise I had not tried nearly the same experiments, and arrived at the same
ical conclusions.

oesa tried the experiment with corn, at the various depths below stated, in
er climate and earlier in the season than mine, which is as late as 6th June.
nted 1 inch deep,—seed came up in 8 1-2 days.
1 1-2 " " " 9 1-2 "
2 " " " 10 "
2 1-2 " " " 11 1-2 "
3 " " " 12 "
3 1-2 " " " 13 "
4 " " " 13 1-2 "
4 1-2 " " " no rise.
5 " " " no rise.
5 1-2 " " " 17 1-2 but died in a few days.
6 " " " no rise.

ne of those that did not rise from deep planting, were very feeble, and did
o much. The first one of mine was washed up; second, third and fourth
up on the sixth day, in the afternoon late; the others could not be found
some two weeks time.

e planted by Petri, to the depth of
1-2 inch, came up in 11 days, 7-8 of seed vegetating.
1 " " 12 " all " "
2 " " 18 " 7-8 " "

3 inches, came up in 20 days, 5-8 of seed vegetating.
4 " " 21 " 4-8 " "
5 " " 22 " 3-8 " "
6 " " 23 " 1-8 " "

I tried wheat, some dibbled in four inches deep. Not the thousandth came up, nor did any make seed; whereas, those covered half to one inch came up finely, and made a fair crop of grain.—four varieties tried.

Ugazy in Andre, gives a table of the result of his very interesting experiments with rye, wheat, barley and oats. I give his deductions,—seventy-six experiments:

"Two-thirds to three-fourths of all the plants had thin root stalks only one inch under ground, and exactly those produced the most stalks; one fourth had roots one and a half inches below the surface, and had only half as many stalks; at two inches deep, only four in one hundred; at two and a half, only nine in one thousand,—only one of these produced a stalk."

For the last five years, I have plowed my land well before sowing grain; then covered the grain with a heavy brush, harrow, or horse rake,—believing that I had lost time and crops by plowing in grain. To explain why others succeed when plowing in their grain, it is only required to measure depth of plowing. I make good crops of rye, without plowing or covering, merely sowing down the grain on corn or cotton land, and know of one crop of oats, one hundred acres sowed down and plowed in; one hundred acres not plowed,—the latter believed to be best.

I was taught to plow in grain, and to cover corn with the plow; but in consequence of repeated failures to get a fair stand, I was led to examine, and to experiment. Necessity was the schoolmaster, and I was taught anew, to plant shallow, and have obeyed teaching. There are many who urge that deep planting is a protection against drouth. I ask them to examine corn that is planted two or three inches deep, say in two or three days after the leaves appear above ground. Again, when the plant is twelve inches high, and again when in tassel. They will find, at first, three roots extending from the grain with numerous small fibres attached thereto; the heart of the grain then also starts up the stem of the plant, which, on reaching near the surface, is formed into a knot or swelling, from whence proceed the three roots that sustain the plant.—the lower portion not larger than a broom straw, not growing on the stem; when examined in second condition is as small as many of the true roots; and when later examined,—is not found at all. We, therefore, find that the theory of deep planting to protect against drouth, is erroneous, as the roots even part off near the surface, and the first three roots perish away; and if they do not, are too small to be of any service, unless acting like "infantismal" doses of medicine do on the transcendentalists.

Corn, like all its (the grass) family, sends its roots superficially, and under favorable circumstances may be at considerable depth, but I do not believe it to be either essential or requisite, nor do I think nature is guilty of doing more than is needed. If the soil be properly prepared, and in condition to nourish the corn, the roots will not dip down. If corn be planted shallow, it will vegetate at a lower temperature of the atmosphere, because the earth is earlier warmed, an inch or so, than three to six inches; and by its vegetating earlier and more certain, we can get a stand more early in the season. Generally, in February, or 1st of March, there is weather warm enough to admit of corn vegetating, if it be planted about one inch: but if planted deeper, rain and cold supervene, which check the vegetating of it, and cause it to rot, or lie some days or weeks dormant. But, if there be a stand, even with deep planting, there is a certain loss to the plant, of the nutrition that the grain is destined to give; that nutrition being expended in bringing the plant, through the earth, where it must remain for a few days until the superficial roots have made sufficient growth to feed the plant. Bruger says—"The more shallow the seed was covered by the earth, the more rapidly the sprout made its appearance, and the stronger afterwards was the stalk."

Let any one notice corn, that is covered with the hoe. It comes up early, grows up immediately and vigorously. See also a volunteer stalk,—and why is it so? Because the grain to the young tender plant, by the sugar found in it, until the roots have extended themselves in search of food, which is done almost as soon as the blades are formed, and being no work of supererrogation, there is every thing done that is needed, and nothing extra. More than this: the crop comes up regular, and grows off; a portion that is not so deep comes up earlier, and getting sooner over the check, grows off, whilst that planted deeper is more tardy in rising, and when up remains in the same condition for days.

In using the expression of deep planting, I mean not only deep planting, but deep covering. Corn, though planted in the water furrow, and covered shallow, is not liable to the same objections. If the land be placed in excellent condition, furrows opened with a shovel plow, so as to have pulverized earth in the furrow for the corn to lie on, and then covered with a harrow, it will do well late in the spring, say last of April; but if done in February or March, it is almost as bad as deep planting on the level.

All know, that cotton seed planted deep, early in the season will rot; whereas, if thrown on the earth, the rains will give them covering enough to get a rise. Small seed cannot rise through every depth of earth. Nature points out the true mode, and but for the birds and other enemies of the farmer, there would be no difficulty in getting a rise of grain &c. The principles of the science of agriculture are the same every where,—we being required to vary one mode of working according to circumstances. Thus, suppose it be a conceded point, that corn when planted shallow, will give a more certain stand, and more luxuriant stalks; yet, if we desire to plant a high piece of land in corn, in June, I would not hesitate to plant it deeper; because, the certainty of an early rise is too important, which is secured by the grain being placed in moist earth. This only forms an exception to the rule, and is taking the lesser evil.

I have now, I earnestly trust, been explicit enough to be understood, so as to give the matter a bearing on the interests of our planting community, and to deserve their attention. If so, I will have done all I desired, and beg to remain your friend and humble servant. A MISSISSIPPI PLANTER.

II.—PRODUCTS OF FLORIDA—SUGAR.*

The Jacksonville Florida News remarks: "We are happy to perceive that very general attention is being awakened to the vast profit which results to the cultivation of the sugar cane in Florida. The climate and the atmosphere give us advantages over Louisiana, and there is no doubt but sugar can be made here equal in quality to any in the world.

"We extract the following paragraph from the National Intelligencer of the 25th ultimo. The cane to which it alludes, exhibited in the capitol, was some that was taken on by Hon. D. L. Yulee, Senator of that State. We saw this cane when he passed through Jacksonville, and, although it is large, it is by no means of the size which it usually attains in good soil. We trust it will have the effect to enlighten those who have hitherto supposed that the sugar cane was only grown in Louisiana:"

"The sugar region in Florida extends from the 30th to the 25th degree of latitude. It comprises within its limits a large amount of very fine land. The climate of the most northern portion of it has, we understand, an advantage of six weeks in the duration of the growing season over any other sugar-growing portion of the United States; and in the southernmost parts of the peninsula there is an entire exemption from frost. The cane is *tasselled* this season throughout the peninsula, a degree of maturity it does not attain in Louisiana or Texas.—The lands are at present cheap—say from $1.25 (the price of public lands) to $10 per acre. There are numerous rivers affording easy transportation on both sides the peninsula. Public sales of some of the State lands will take place in February next. These lands have been carefully selected by agents in bodies of half a section (320 acres,) and are generally well situated for the sugar culture. A sample of the Florida cane of this year, now to be seen at the capitol, is between ten and eleven feet long, entirely divested of top, and was cut nearly a month ago, before it had attained its proper growth. Still larger canes than this, however, are grown in Florida."

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* *For valuable papers upon Florida*, see Commercial Review, vol. iv., 38, 244, 247, 248, 249.

The St. Augustine Herald gives the following interesting statement of the produce of 1 3-4 acres of land at Moccasin Branch, in St. John's county, which had been planted in cane by Mr. Paul Masters.

10 barrels of sugar, 250 lbs. each, at 6 cents, - - - - - -	$150 00
100 gallons molasses at 25 cents, - - - - - - - -	25 00
37 1-2 bushels of corn at $1, - - - - - - - - - - -	37 50
Cane sold, - - - - - - - - - - - - - -	20 00
	$232 50

This is at the rate of one hundred and thirty-three dollars to the acre, and was produced from high pine barren land, cow-penned. Mr. Masters is a poor man, without any negroes, and had only the assistance of a son of 18 years of age. to obtain the above together with an excellent crop of corn, peas and potatoes Mr. Masters made his own mill, and boiled the juice down in a common pot in the open air.

Mr. Francis Rogero, from 1 1-4 acres of same quality of land obtained fifteen barrels of syrup and two barrels of sugar. In value:

465 gallons syrup at 31 cents, - - - - - - - - - -	$144 15
500 lbs. sugar at 6 cents, - - - - - - - - - - -	30 00
	$174 15

This is at the rate of $139 32 to the acre. When it is considered that this is the produce of the poorest quality of land, and that the sugar was manufactured in the rudest manner, no one can doubt that the sugar cane alone should be cultivated by the planters of Florida. There are hundreds of thousands of acres of the richest land in this State lying in small bodies, of from 100 to 1000 acres, which might produce far more abundantly than the above.

III.—THE COTTON REGION OF THE UNITED STATES.

We take the following observation from an article in a late number of the Southern Quarterly Review, as having interest with the major portion of our readers, and touching the great interest of our South Western country.

The climate suited for cotton, even in the United States, is far more limited than was formerly supposed. The truth is, the next few years will show that its production is not very far from reaching its maximum. It is not new and rich soil alone that gives a heavy yield of cotton. It requires a dry autumnal climate and a soil of moderate fertility, where the plant does not grow too large, and where, by the growth being exhausted in August, the bolls mature. The slopes towards the Atlantic, from the Alleghany, will be generally more favorable to the maturity and gathering of cotton than those towards the Gulf. The trade winds that are felt in the latter, and the peculiar formation and luxurious fertility of the vast alluvial soil upon the depressed vallies of all the large water-courses that empty into the Gulf of Mexico, will always make it a more moist climate than that of the Atlantic slopes. This will be peculiarly favorable to the generation of insects and diseases in the plant, and too large a growth of wood and weed, which will make it a more variable and uncertain crop. The soil of the Gulf region is very fine for cotton in the spring, far better than the Atlantic region, but the latter part of the season is not so favorable. All this shows that climate is as important an element in the permanent production of cotton as is soil, and justifies the belief that we have approached nearer our maximum production than is generally supposed. As far back as 1834, the Secretary of the Treasury estimated that we had 2.000,000 of acres in cotton. In 1839, we raised 2,177,835 bales; in 1843, the crop only reached 2,030,400; in 1842, it was 2,379,411 bales, and in 1844, 2,415448, (much the largest product of any year,) while in 1845, the amount barely exceeded 2,000,000 of bales, and in 1846, it was less than 1.800,000 bales. Even with the advantage of an autumn singularly favorable to the maturity and gathering of the cotton, there is little probability that the present crop will exceed 2,000,000 of bales.

We believe the number of acres in cotton has much increased within the last ten years, but not in proportion to the product. Probably the Secretary of the Treasury underrated the number of acres, even in 1834. He then allowed 250 *to 300* pounds nett cotton per acre as an average product, whereas the average throughout the United States does not exceed 185 pounds nett per acre, for a

years. But put it at 200 pounds, and to produce 2.000,000 of bales, at
ds each, would then require 4,000,000 of acres. We prefer the follow-
iates of our own to those made out by the Secretary of the Treasury.
opulation engaged in or connected with the production of cotton in the
tates, may be estimated at about 2,500,000, and of this number one-half
put down as children, or under the working age, which would leave
, and of this number there are rather more than half whites, say, at any
,000, and of this 625,000 one-half are females (312,500) who are not
orers in cotton at all, and there may be said to be also of that number
nen in the towns and villages, mechanics, professional men and gentle-
fortune, who are not cultivators of cotton. This, then would leave
aborers engaged in the culture of cotton, which, at five acres per hand,
ake the 4.000.000 of acres.

ve acres per hand is a sufficient estimate, considering that in the moun-
ions of South Carolina, Georgia and Alabama, and high up in Missis-
kansas and Tennessee, they do not cultivate three acres per hand; while,
at, in the real cotton region, they may reach eight acres, and even, in
as high as ten acres per hand. It must also be considered that these
producers of cotton, cultivate, at the same time, at least six acres per
grain besides. Then say these 800,000 laborers produce annually two
lf bales per hand, at 400 pounds, and the result is, the 2,000,000 of bales
otton crop of the United States, or the 800.000,000 pounds nett cotton,
ould give 1,000 pounds nett per hand. This is about correct, if we em-
e whole region engaged in cotton. Yet there are favored sections that
en 3,000 pounds per hand; but an average, for several years, of 1,000
, for the whole region engaged in cotton, is a full estimate. This 1,000
it ten cents, would be 100 dollars per hand for gross sales, and, deduct-
ollars per hand for overseers' wages, physicians, implements, taxes and
cotton to market, &c., &c., there will remain 60 dollars nett per hand,
.000 dollars nett for the cotton crop, to the planters.

report of the Secretary of the Treasury, he puts the average product
at 250 pounds, and eight acres per hand in cultivation, both of which
are excessive, when we include the whole cotton region. It may be
south Alabama and Georgia and lower Mississippi. He also estimates
ge value of cotton lands in cultivation at 20 dollars per acre, and the
nds in cultivation at the same price. His language is: "Capital in
ds to support stock, raise corn, &c., at 20 acres to each of the 680,000
supposed to be engaged in cotton, worth 20 dollars per acre cleared,
00 dollars." All this is an over estimate. In this way he makes the
ested in raising cotton amount to 771.000.000 dollars.

efer taking the census book of 1840, and, from the general tables there
, making the following estimate of capital vested in raising cotton.

luding, as well as we can, all those in the cotton States who are enga-
e culture of rice and sugar, as well as those in the mountains of Geor-
ama and South Carolina, who produce grain only, and by adding those
Carolina, Tennessee and Arkansas, who are engaged partially in pro-
otton, we estimate the slaves at 1,000,000. And of this 1,000,000 we
700 000 as workers, which is probably not excessive, when we consider
South-West—the great cotton region—is newly settled and the number
en out of all proportion less than in regions peopled by the natural
f population. To get the 800,000 laborers, we add 100,000 white labor-
700,000 slaves, which makes the estimated daily workers in cotton.
have—

000 slaves,	at	$500	$500,000.000
. 4,000 000 of acres,	"	10	40.000,000
in grain, 6,000.000 acres,	"	10	60.000,000
. timber and pasture, 10,000,000 acres,	"	2	20.000.000
s and horses, 300 000,	"	80	21.000.000
and sheep, 4,200,000,	"	1	4.200.000
e. 200,000,	"	5	1,000.000
s, 400,000,	"	2	800.000
r implements, tools, &c.,			600.000
			$650,600,

We cannot understand in what way the capital vested, can be put down as more. The Secretary estimates the working slaves at 800 dollars per head, and the following item which he puts down in this language: "the maintenance of 340,000 more assistants, &c., at 30 dollars each per year, would require the income of a capital, at six per cent., of 167,000,000 dollars," we do not exactly comprehend.

We prefer the estimate we have made as above. This capital of 650,000,000 dollars, and at 6 per cent., would be 51,549,000 dollars. The crop of cotton estimated at 2,000,000 bales, of 400 pounds, would be 800,000,000 pounds, and this, at 10 cents would be 80,000,000 dollars. Take off expenses for overseers, physicians, taxes, freight on cotton, &c., estimated at 40 dollars per hand, (and this is little enough when we consider the children to be supported,) and we have 48,000,000 dollars as nett profit, which would be a little under 7 per cent. upon the capital vested. It must be recollected that this estimate is made upon cotton at 10 cents, and whenever it sinks one cent below that, the nett income falls off in a much greater proportion, as the expenses continue the same. And so, in like manner, when it rises above that point, the nett income increases vastly, the expenses being stationary.

When we consider that there is an increase and improvement in the annual value of the negroes upon every well regulated cotton farm, and that the great majority of planters raise or support their families from what may be called the offal of a farm, that is, from what is raised on it and is scarcely missed or calculated in its products, which is always the case when the owner lives on it, then we are induced to believe there is no investment known of capital as large as 650,600,000 dollars equal in value to that in cotton.

COMMERCE AND PROSPERITY OF WESTERN CITIES.

From the latest and best sources of information at our command, we give a brief summary, exhibiting the business of several western cities. At another time we shall glance elsewhere, and afford our readers a commercial outline, embracing the main cities of the Union. We begin with:

IMPORTS INTO ST. LOUIS FOR FOUR YEARS,

Commencing January 1, 1844.

ARTICLES.	1847.	1846.	1845.	1844
Bacon, casks, - - - - - -	12,472	12,631	9,620	[illegible]
Beef, bbls., - - - - - -	10,254	12,356	7,029	4,172
Bagging, pieces, - - - - - -	1,432	3,229	6,036	4,591
Bale Rope, coils, . - -	16,768	5,802	9,229	14,316
Barley, sacks, - - - - -	35,527	13,212	15,128	7,065
Buffalo Robes, bales, - - - -	7,782	5,976	3 567	3,598
Beeswax, bbls., - - - - - -	759	532	531	[illegible]
Beeswax, sacks, - - - - -	708	827	509	[illegible]
Corn, sacks, - - - - - - -	478,449	372,781	44,341	[illegible]
Coffee, bags, - - - - - - -	77,767	60,450	46,802	[illegible]
Flour, bbls., - - - - - -	435,019	223,670	132,196	[illegible]
Fish, bbls., - - - - - - -	3,484	1,572	4,008	1,970
Fish, kits, - - - - - - -	2,734	2,020	1,492	[illegible]
Hemp, bales, - - - - - -	81,525	34,738	30,985	[illegible]
Hides, ——, - - - - - -	71,877	84,980	72,918	[illegible]
Iron, bundles, - - - - -	25,605	22 651	13,238	[illegible]
Iron, bars, - - - - - - -	91,513	63,712	59,607	57,316
Iron, tons, - - - - - -	17,018	1,716	164	[illegible]
Lead, pigs, - - - - - -	767,558	763,489	757,908	[illegible]
Cotton, boxes, bags, - - -	15,147	17,726	15,222	13,716
Lard, bbls., - - - - - -	31,005	24,542	8,502	[illegible]
Lard, kegs, - - - - - -	12,347	19,351	5,303	[illegible]
Liquors, casks, - - - - - -	3,102	3,122	2 638	[illegible]
Molasses, bbls., - - - - -	21,554	16,774	11,876	[illegible]
Nails, kegs, - - - - - -	22,789	33,303	14,831	[illegible]
Oats, sacks, - - - - - -	101,203	59,620	21,960	[illegible]
Oil, Lard, bbls., - - - -	478	274	222	[illegible]
Oil, Linseed, bbls., - - - -	485	806	810	[illegible]
Oil, Castor, bbls., - - - - -	332	230	48	97

[TABLE CONTINUED.]

ARTICLES.	1847.	1846.	1845.	1844.
rm, casks, - - - -	186	169	169	81
bls., - - - - -	45,922	15,613	16,199	46,836
al, tons, - - - -	2,963	9,504	1,303	1,110
erces, - - - - -	702	8,666	708	518
hhds., - - - - -	12,661	13,898	10,237	10,738
bbls., - - - - -	4,083	4,917	3,193	2,679
boxes, - - - - -	15,028	1,090	1,053	1,607
I., sacks, - - - -	22,083	15,823	90,278	49,683
A., sacks, - - - -	92,809	167,581	82,520	86,001
anawha, bbls., - - -	44,380	62,180	21,684	14,277
B., sacks, - - - -	17,632	28,478	20,347	17,454
Turpentine, bbls., - . -	619	749	317	419
deer, bales, - - - -	2,097	1,610	1,862	1,243
ax, bbls., - - - - -	4,902	4,081	2 045	4,273
o, hhds., - - - - -	10,935	8,767	12,856	10,013
o, boxes, - - - - -	9,593	6,676	7,372	4.823
, bbls., - - - - -	2,217	1,754	1,785	5,331
ls. and kegs, - - - -	5.658	5,235	4,942	6,141
bales, - - - - -	2,107	1,903	1,899	1,377
y, bbls., - - - - -	30,247	29,832	23,445	24,147
bbls., - - - - -	97,123	81,350	77,150	54,887
sacks, - - - - -	1,222,433	743,491	382,323	257,032

EXPORTS FROM ST. LOUIS FOR FIVE YEARS,

Cammencing January 1, 1843.

ARTICLES.	1847.	1846.	1845.	1844.	1843
, assorted, casks, - -	14,085	13,641	7,628	14,953	17,676
. bbls., - - - -	4,092	4,916	7,908	6,207	1,470
, bulk, tons, - - -	675	569	148	292	302
bbls., - - - -	12,798	20,113	5,324	5,694	11,288
ing, pieces, - - -	3,363	4,784	8,182	4,248	5,007
Rope, coils, - -	12,632	10,016	12,896	22,431	15,490
ax, bbls., - - -	624	913	1,219	1,576	1,145
, bbls., - - -	4,490	4,408	2,170	1,448	1,327
o Robes, bales, - -	3,879	3,630	2,717	7,404	8,441
sacks, - - -	395,683	243,026	23,478	25,191	21,605
, bbls., - - - -	448,614	359,858	202,790	130,274	123,977
, - - - -	73,586	44,962	50,828	57,220	38,175
, bales, - - -	65,752	31,352	29,604	52,654	28,704
pigs. - - -	591,791	663,505	637,033	553,719	538,762
bar, boxes, - - -	3,136	2,932	1,850	4,442	2,624
bbls., - - -	39,513	26,412	13,318	25,127	22,187
kegs, - - - - -	21,344	32,729	15,691	36,410	27,790
sacks, - - -	16,957	41,176	8,434	7,889	7,396
inseed, bbls., - -	1,007	521	——	40	526
astor, bbls., - -	933	1,269	1,231	1,458	1,493
ard, bbls., - - - -	——	619	733	3,337	3,420
bbls., - - -	56,467	62,820	22,230	50,225	35,211
bulk, tons, - - -	621	805	203	498	183
sacks, - - - -	2,250	1,167	1,750	4,188	3,120
kegs, - - - - -	2.506	4,122	4,216	3,070	3,393
deer, packs, - -	3,700	2.162	2,677	2,726	1,034
flax, tierces, - - -	660	1,118	1.306	2,103	2,432
co. hhds., - - -	9,851	8,450	11,284	9,500	19,730
co, manufactured, boxes,	4,841	6,183	7,832	8,844	7,734
w, bbls., - - -	2,092	5,955	1,316	2,313	1,380
, bbls., - - - -	10,318	16,231	29,796	16,864	20,691
, sacks, - - -	610,237	217,319	68,634	60,894	438,331
, bales, - - - -	1,414	1,335	1,326	1,048	311

TOBACCO.

*omparative Receipts, Sales, and Direct Shipments, for the last five years.*r

R.	Total Receipts.	Sales Here.	Shipped Direct.
3, - - - - -	20,668	6,847	13,822
4, - - - - -	10,013	4,447	5,556
5, - - - - -	12,856	6,290	6,566
6, - - - - -	8,767	3,898	4,869
7, - - - - -	10,935	5,089	5,846

Gross amount of Receipts at the Custom House at St. Louis, from January 1st, 1843 to January 1st, 1848.

From January 1st, 1843, to January 1st, 1844,	$ 5,554 79
From January 1st, 1844, to January 1st, 1845,	16.181 11
From January 1st, 1845, to January 1st, 1846,	16.312 11
From January 1st, 1846, to January 1st, 1847,	29,781 69
From January 1st, 1847, to January 1st, 1848,	73,908 10

II—CHICAGO.

In our numbers for September and November, for 1847, we gave the particulars of the great "Chicago Convention." Various committees were appointed by it. The present paper was prepared by Hon. Jesse B. Thomas, as a report, and kindly furnished us by the author. We publish the most material parts now, and shall on another occasion digest the remainder. We shall also direct our attention to the other reports as they appear.—Editor.

"Although we have been induced to regard 1832 as the period from which to date the commencement of Chicago, still it should be stated, measures intimately connected with the place, originated at an earlier period. Soon after the organization of the state government, at the second session of the legislature, an act was passed to construct the Illinois and Michigan Canal, and the subject continued to be legislated upon at almost every subsequent session. down to the present time. In 1826-7, Congress donated each alternate section of land for ten miles in width along the line, to aid the State in the construction of the work, and at the same time granted the right of way. The principal part of Chicago was included in this grant, and in 1829 commissioners appointed for the purpose, laid out the original town, amounting to about half a section on both sides of the river, and the next year, 1830, sold a few lots to pay the expenses of the survey. The original town is now the centre. and most valuable portion of the city. Prices of lots at this sale were very moderate, from $5 to $20. A few hundred dollars would then have purchased Lake street, now worth millions. Few persons here at that period probably dreamed that a place of seventeen thousand inhabitants would grow up here in the short space of fifteen years, although some may have foreseen its ultimate importance. The external appearance of things was far from encouraging. There were a few log, and two or three frame buildings scattered over the town site; besides a few more in different parts of the county of Cook, amounting to some twenty in all. besides the fort. A small beginning, it must be confessed for the Garden City, but it was fifteen years ago.

Down to 1837, as before intimated, very little was done at Chicago but operate in real estate. Very little or nothing was raised. Domestic wants of the community even, were supplied from the East. Vessels rarely came here. and the arrival of a schooner off the town was an event of the greatest importance. There were no roads, and scarcely any travel. A weekly mail on horseback. was first received from Niles in 1832; a one horse wagon succeeded in 1833, followed in 1834 by a four horse stage line, and a daily mail in 1837. Scarcely any domestic improvements of a durable character was attempted, except dwelling houses, although the Lake House. and two or three other substantial brick blocks and several warehouses date at this period. The harbor was commenced in 1833, and the first work done on the canal on the 4th of July, 1836. In 1834 the Chicago Democrat. and in 1835 the Chicago American, two weekly newspapers, were started. The school section, one mile square, of valuable land within the city limits, was sold about this time, for some forty thousand dollars. In the winter of 1836-7 the legislature passed the act incorporating the city.

In 1837, speculation having run its career, the bubble burst, and brought ruin to thousands who had become identified with it and risked their all upon its chances. It was a severe calamity to Chicago. Without capital, without a currency, with undeveloped resources, without trade, the dissipation of this fatal illusion left her citizens nothing but a mountain of indebtedness, and the lands for which it had been incurred, now worse than valueless. Every thing remained stationary until about 1840, until times had improved, population had come in, farms had been opened in the country, trade had revived, and especially by he

interposition of law, the fetters were removed from business men, and enter-
permitted to act untrammelled for the advancement of private interest, and
elfare of the community. The condition ot things during this period would
been more deplorable than they were, but for the partial benefit derived from
anal, which was in progress of construction, and the harbor, upon which
al appropriations were expended.

out 1840 Chicago experienced the first healthy growth, and real substantial
erity; not, however, so strikingly perceptible previous to 1843, as the four
following. From 1843 to the present time, the place has advanced with a
ity unexampled in the history of cities. Capital to some extent, has been
luced, the country generally settled, the soil has been brought to furnish pro-
ons for export; real estate, both lots and lands, has become valuable; our
ns, many of them, have become wealthy, and population and trade, both ex-
and import, have, during the short period of four years, more than doubled—
nearly trebled.

e most satisfactory evidence we can furnish, not only of what Chicago now
t of what she has been, and may reasonably become, will be found in the
ving statistical tables of population, trade, etc., to which attention is directed
at purpose:

POPULATION OF CHICAGO.

	4,853	1845,	12,088
	7,580	1846,	14,199
	——	1847,	17,000
rease,	2,727		

ES, OCCUPATIONS, AND PROFESSIONS IN THE CITY OF CHICAGO, NOV. 1, 1847

chitects, 2; Attorneys, 56; Auction and Commission Stores, 8; Bandbox
ufactory, 1; Bankers and Brokers, 6; Barbers, 15; Bath House, 1; Billiard Sa-
, 3; Blacking manufactory, 1; Blacksmiths, 12; Bookbinders, 2; Booksellers,
ot and Shoe Makers, 25; Bowling Saloons, 5; Brass Smith, 1; Brewers, 3;
lers, Master, 17; Cabinet and Chair man, 12; Churches, 20; Clothing Stores,
offee Houses, 9; Colleges, 3; Commission Houses, 3; Cradle Maker, 1; Con-
ners, 4; Coopers, 14; Crockery Stores, 3; Dentists, 5; Depositories, 3; Door
ories, 4; Drug Stores, 10; Dyeing Establishment, 1; Dry, Fancy and Staple
s, 8; Dry Goods and Grocery Stores, about 300; Engravers, 2; Engine Fire
panies, 10; Flour Stores, 2; Forwarding, Storage and Commission, 18; Foun-
, 6; Fruit Stores, 9; Fanning Mill Makers, 2; Glove and Mitten Man, 2;
der and Cutler, 1; Groceries, wholesale and retail, 65; Gunsmiths, 2; Hard-
Stores, 17; Hat, Cap, etc., Stores, 6; Hotels and Taverns, 25; Hydraulic
panies, 2; Ink Manufactory, 1; Ins. Com. and Agencies, 13; Justices of the
e, 5; Land Agencies, 4; Land Offices, 2; Leather Store, 1; Libraries, (12,500
) 3; Liquor Stores, (wholesale,) 1; Livery Stables, 7; Locksmith, 1; Looking
s manufactory, 2; Lumber Dealers, 24; Mill Wrights, 2; Marble Factory, 1;
cets, 15; Millinery, 15; Mills, 5; Notaries Public, 6; Newspapers, 4 daily,
ekly, and 4 monthly,—total 14; Oil; Soap and Candle Manufacture, 8, Pack-
Houses, 6; Painters and Glaziers, 8; Painters, Ornam. and Min, 2; Portrait
ters, 2; Pawnbrokers, 3; Physicians, 31; Potteries, 1; Printing Offices, 11;
er's Wareroom, 1; Reading Room, 1; Starch Manufactory, 1; Steam Plan-
Mills, 2; Schools, Public, employing 10 teachers, and numbering 1500 scho-
4; Schools, private, employing 20 teachers, and numbering 1,000 pupils, 15;
le and Harness, 8; Ship Builders, 3; Ship Chandlers, 2; Societies, 33; Tai-
25; Tanneries, 2; Theatre, 1; Tobacco and Cigar Manufac., 3; Undertakers,
holsters, 1; Wagon Makers, 13; Watchmakers and Jewelers, 7.

*LE showing the exports of leading articles from Chicago, in six years, from
12 to 1847, inclusive:*

	Wheat. Bush.	Flour. Bbls.	Beef and Pork. Bbls.	Wool. Pounds.
	586,907	2,920	16,209	1,500
	628,967	10,786	21,492	22,050
	891,894	6,320	14,938	96,635
	956,860	13,752	13,268	21[illegible]
	1,459,594	28,045	31,224	
	1,974,304	32,538	48,920	

TABLE exhibiting the amount of goods, wares, and merchandize received at Chicago, from the opening of navigation in the spring of 1847, *to November 1st, near the close of navigation*, 1847; *not including goods landed here and taken to the interior; compiled from the original invoices of merchants.*

Dry Goods, - - - - - -	$837,451.22	Liquors, - - - - - - - -	$86,334.67
Groceries, - - - - - -	506,027.56	Tobacco and Cigars, - -	3,716.00
Hardware, - - - - - -	148,811.50	Ship Chandlery, - - - -	23,000.00
Iron and Nails, - - -	88,275.00	Tools and Hardware, -	15,000.00
Stoves and Hollow-ware,	68,612.00	Furniture Trimming, - -	5,564.07
Crockery, - - - - - - -	30,505.00	Glass, - - - - - - - -	8,949.24
Boots and Shoes, - - -	94,275.00	Scales, - - - - - - - -	4,044.55
Hats, Caps, and Furs, - -	68,200.00	Coaches, &c., - - - - -	1,500.00
Jewelry, &c., - - - - -	51,000.00	Looking Glasses, &c., -	2,500.00
Books and Stationery, - -	43,580.00	Marble, - - - - - - - -	8,000.00
Printing Paper, - - - -	7,284.11	Oysters, - - - - - - - -	2,500.00
Presses, Type and Printing materials, - - -	7,432.50	Sportman's articles, - -	2,000.00
Drugs and Medicines, - -	92,081.41	Musical Instruments, - -	6,426.00
Paints and Oils, - - -	25,460.00	Machinery, &c., - - - -	30,000.00

Total value of imports of merchandise, - - - - $2,259,309.83

TABLE of imports of miscellaneous articles.

Salt, barrels, - - - - - - - - -	24,817	Coal, tons, - - - - - - - - - -	15,782
" sacks, - - - - - - - - - -	5,537	Water lime, bush., - - - - -	1,618

Value, $117,210.29

And numerous other articles not here enumerated, such as pig iron, white fish and trout, fruit, grindstones, cider, &c., the precise quantity not known, but in considerable amount.

TABLE exhibiting the exports from the port of Chicago from the opening of navigation, 1847, *to Nov. 1st*, 1847.

Wheat, bushels, - -	1,974,304	Flax Seed, bushels, - -	2,262
Flour, barrels, - - -	32.598	Mustard " " - - -	520
Corn, bushels, - - -	67,315	Timothy, " " - - -	536
Oats, " - - -	38,892	Hay, tons, - - -	415
Beef, barrels, - - -	26,504	Cranberries, bushels, - -	250
Pork, " - - - -	22,416	Buffalo Robes, bales, - -	60
Hams and Shoulders, lbs., -	47,248	Dry Hides, - - - - -	,8774
Tallow, pounds, - - -	208.435	Deer Skins, pounds, - -	28.259
Butter, " - - - -	47,536	Sheep Pelts, - - - -	1,133
Beans, bushels, - - -	430	Furs, packages, - - -	278
Wool, pounds, - - -	411,088	Ginseng, pounds, - - -	3,625
Tobacco, " - - -	28.243	Ashes, barrels, - - -	16
Lard, " - - - - -	139,069	Bristles, pounds, - - -	4.548
Leather, " - - - -	2,740	Glue, - - - - - -	2,480
Beeswax, " - - - - -	5,490	Brooms, - - - - -	3.168
Oil, gallons, - - -	8,793	White Fish, barrels, - -	1,229
Lead, pounds, - - - -	10.254	Barley, bushels, - - -	400
Hemp, " - - - - -	6.521		

Value, $2,296,299

Besides a large amount of merchandize, produce, provisions, grain, horses, cattle, salt, and supplies of all kinds sent to the lumber and mining regions, and different ports on the upper and lower lakes.

EXPORTS AND IMPORTS.

	Exports.		Imports.
1836, - -	$ 1,100.64	1836, - -	$325.203.90
1837, - - -	11,065.00	1837, - - -	373,677.12
1838, - -	16,044.75	1838, - -	579.174.61
1849, - - -	33,843.00	1839, - - -	630,980.26
1840, - -	228,635.74	1840, - -	562,106.20

[TABLE CONTINUED.]

	Exports.		Imports.
1841,	$348,862.24	1841,	$564,347.88
1842,	659,305.20	1842,	664,347.88
1843,	682,210.85	1843,	971,849.75
1844,	784,504.23	1844,	1,686,416.00
1845,	1,543,519.85	1845,	2,043,445.73
1846,	1,813,468.00	1846,	2,027,150.02
1847,	2,296,299.00	1847,	2,641,852.50

III.—PITTSBURG.

With its dependencies of Birmingham, Sligo, Alleghany City, and the like, which lie across the Monongahela and Alleghany rivers, the population of Pittsburg is said to range between 60,000 and 80,000. The Iron Works are more extensive, perhaps, than those of any other city in the Union. There are eleven rolling mills in and about Pittsburg, of which eight are capable of producing 4,000 tons, each, of manufactured iron, annually, and employ about 150 hands to the mill. This iron is of a superior quality, and is used for boilers, axles, wire, sheets, and the like. The pig metal is supplied principally from the charcoal furnaces along the river. Something like 75,000 tons of pig metal is consumed a year, between the mills and foundries. The manufacture of glass is carried on extensively. Besides fourteen establishments, the work of which is known as country glass; there are seven flint glass factories in the vicinity, six for window glass, five for green glass and one for black glass. These employ twenty-five or thirty men each, and more than a million of dollars is invested. Nail factories are also numerous and upon a large scale. One has a capacity of 2000 kegs per week, and others are nearly equal to it. The demand is greater than the supply, and the orders extend from Buffalo to New Orleans. It is estimated that sixty steamers will be built at Pittsburg the present year.

The trade with the Lakes has doubled itself every year since 1844, owing to the facilities of communicating through the two great avenues to Erie and to Cleveland.

Table of some of the principal articles of exports and imports via canal in 1846 and 1847.

EXPORTS.

	1847.	1846.
Cotton, lbs.	1,056,138	1,000,971
Hemp	3,311,618	1,287,886
Tobacco, leaf	14,777,059	24,696,742
Groceries,	1,978,822	1,571,889
Hardware, cutlery,	216,887	239,353
Iron, pigs	65,537	2,675,341
—— castings	250,910	
—— blooms	13,836	333,702
—— cast steel	549,416	319,736
Lead	188,078	325,085
Nails and spikes	51,760	82,732
Bacon	12,713,427	21,661,236
Beef, pork	41,225	19,620
Butter	747,645	800,265
Flour, brls	297,940	156,412
Lard, lard oil, lbs	5,319,378	2,929,286
Tallow	62,946	291,313

IMPORTS.

	1847.	1846.
Agricultural		
Not specified, lbs	1,257,620	871,500
Oats, bushels	21,360	19,080
Leather, lbs	312,239	386,225
Coffee, lbs	9,927,605	10,920,993
Dry goods, lbs	23,201,074	12,651,818
Groceries	7,833,925	6,923,856
Hardware and Cutlery, lbs	14,501,693	10,522,463
Coffee, lbs	384,966	429,139
Iron pig, lbs	21,979,353	15,410,661
—— castings	124,662	
—— blooms	14,942,390	13,890,707
—— bar & sheet	4,397,268	2,833,879
Nails & sp's, lbs	15,886,711	575,402
Fish, lbs	5,977,891	brls 19,600

STATEMENT, *showing the number and extent of the Cotton Factories of Pittsburg.*

Companies.	Bales.	Number of Spindles.	Weight of Yarn daily.	Weight of Cloth daily.	Yards of Cloth per annum.	Number of Hands.	Looms.	Product.
Hope	3,100	6,500	4,000	....	......	275	...	$216,000
Eagle	3,000	5,700	3,800	....	......	250	...	205,200
Union	1,600	4,500	1,500	500	......	200	40	116,500
Pittsburg	1,600	5,300	....	2,000	1,620,000	200	150	138,000
Penn	2,400	6,200	....	3,000	2,410,000	260	210	207,000
Starr	800	2,500	....	900	729,000	80	75	62,100
Gray's	400	1,200	500	....	......	40	...	27,000
	12,900	31,900	9,800	6,400	4,759,000	1,305	475	$971,800

In addition to her numerous establishments, Pittsburg has some twenty to twenty-five foundries in successful operation, in the manufacture of cannon cotton presses, sugar mills, plows, and the like.

IV.—WHEELING.

The enterprise and activity of this town may be seen in the following results: The rolling mill produces at the rate of $500,000 annually, and another large establishment of the same kind is progressing. The foundries yield about $150,000, engine shops $100,000, cotton factories $80,000, steel factory $90,000, wagon makers $150,000, paper mills $140,000, tallow chandlers $100,000, and glass work $200,000, silk factory $75,000, copper and tin workers $50,000, boat yards $150,000, cabinet makers $100,000, tobacco $120,000, saddle and harness makers $75,000, chairs $80,000, white lead $25,000, hat and caps $50,000, besides numerous other works of various kinds, yielding in all, not less than four millions annually. These establishments are all prosperous, having as much as they can do and having a market to be supplied that would be equal to the supply of five more establishments in each branch of business.

V.—CINCINNATI.

The following table shows the exports from Cincinnati for four years past of the leading articles of produce. The exports of 1844, '45 and '46, do not include the shipments up river, but only to Southern ports. The movement, however shows an increase in the trade of that flourishing city:

ARTICLES.	Sep. 1, '43, to do, '44.	Sep. 1, '44, to do, '45.	Sep. 1, '45, to do, '46.	Sep 1, '46, to do. '47.
Beef, bbls.	8,878	14,574	8,432	10,367
Do. trcs.	5,243	3,522	8,874	7,970
Corn, sacks,	4,151	233	528	258,198
Corn Meal, bbls.	621	1,616	1,207	88,182
Cheese, casks,	543	716	169	1,132
Do. boxes,	36,897	43,705	37,099	70,104
Flour, bbls.	204,589	167,601	212,139	581,920
Lard, bbls.	29,266	24,227	28,481	49,578
Do. kegs,	201,726	180,559	152,079	150,823
Bacon, hhds,	15,454	15,454	18,366	31,538
Do. trcs.	2,609	2,609	2,891	7,894
Pork, bbls.	129,399	103,036	124,024	137,218
Do. lbs.	1,186,550	694,755	410,891	3,478,856
Whisky, bbls.	90,052	133,158	103,953	183,928
Oats, sacks,	6,873	9,966	22,091	140,067

The increase in Breadstuffs is particularly to be noted.

COMMERCE OF THE LAKES AND WESTERN RIVERS.

The nett money value of the *lake commerce* for the year 1846, was $61,914,910; ring nearly doubled in five years. For the same year the total amount of ierican lake tonnage was 106,836 tons, and of merchandise 3,861,088 tons. tish, 30,000 tons. Estimates from highly intelligent authority make the cost constructing this tonnage $6,000,000. The passenger trade is also an impor- t item in lake commerce. The number of passengers, in all directions, is ted at 250,000; which, at $5 each as average charges, gives for its value, 250,000. The number of mariners employed was 6,972.

The aggregate population depending on the lakes for means of communicating h a market, in 1846, was 2,928,925.

f the *Western rivers*, i. e. the Mississippi, and its direct and indirect tributa- s, it appears from the official returns of the Treasury department, that the amboat tonnage for the year 1842, was 126,278; and for 1846, 249,055. It is posed that there are 300,000 tons of other boats (not steamboats) employed on se rivers, which, added to the steamboat tonnage, gives for the year 1842, an gregate of 426,278, tons. The flat-boat navigation is supposed to carry to rket, in one year, 600,000 tons of produce, while the steamboat freight amount- to 1,262,780 tons, or a total merchandize transported to and from New Orleans the Western rivers, (exclusive of the way-trade,) for 1842, of 4,862,780 tons. e probable money value of this commerce, for the same year, can be stated at .506.903; and for 1846, according to a statement from the Treasury Depart- nt, $62,206,719. This includes, of course, only the *direct* river commerce, and that immense amount of commodities interchanged between place and place the Western rivers, and which forms no part of the New Orleans commerce. this latter, the total *nett* value can be stated for 1846, at $148,306,710—the *ting* value cannot be less than double this amount. The passenger trade, too, very great, and is supposed to have yielded for 1846 $3,191,982, making the al commerce of the Western rivers, $151,498,701. The steam tonnage for 16, is stated at 249,054 tons.

The total cost of the river craft, engaged in this trade, was $12.942,355, and stained at an expense of $20,196.242 per annum. The number of hands em- yed (not shore employees) was 25,114. These amounts the Bureau considers small, or at least not at all exaggerated; and that if $183,609,725 be assumed a reliable exposition of Western commerce for 1846, instead of $151,498,701, will more nearly approximate to the truth.

The total *population* depending upon the Western rivers as a means of com- nication with a market, for the year 1846, was 6.576,027—the rate of in- ase 1840 to 1845 having been about 5 per cent. The Mississippi, with its butaries, which traverse every section of this immense valley, furnish 16,674 les of good steamboat navigation, thus affording great natural facilities for the elopment of its unlimited resources.

These facts, in reference to the commerce of the lakes, (says the Report,) and estern rivers, justify the following conclusions:

lst. That the nett moneyed value of the commerce of the lakes and Western ers, including the passenger trade, amounted, for the year 1846—

Of the lakes to	$63,164,910
Of the Western rivers to	$183,609,725
Aggregate	$246,774,635

d. That the population depending upon the lakes and upon the Western ers as a means of communicating with a market, was, for the year 1846—

For the lakes	$2.928,925
For the Western waters	6,576.027
Aggregate	$9,504,952

d. That the number of hands employed in this commerce as mariners, exclu- e of shore hands, for the year 1846—

For the lakes	6,972
For the Western waters	25,114
Aggregate	32,086

And it may be added that the total amounts which have been appropriated and expended for lake harbors, and for the improvement of the Western rivers, from the year 1806, when these appropriations by the General Government commenced, up to, and including the last appropriations of 1845, are—

For the lake harbors - - - - - - - - - - - -	$2,790,500
For the Western rivers - - - - - - - - - - -	2,758,800
Aggregate - - - - - - - - - - - - - - -	$5,549,300

The tonnage of Lake Champlain is stated at 3192 tons, and the value of the export and import trade for 1846, $11,266,050. The total amount appropriated for the improvement of its harbors is $191,500. The tonnage of Lake Ontario is stated to be 65,636, of which 42,325 tons are British, and 25,311 American. The export and import trade for 1846 is stated at $14,025,907, and the total amount expended for its harbors, $608,902. On Lake Erie, the total amount expended for harbor improvements is $1,348,249, and the total amount of its commerce (exports and imports) in 1846, $94,358,350. The total amount of expenditures on Lake Michigan for harbor improvements, is $604,447; amount of commerce not known. For Chicago, however, it amounted, in 1846, to $3,027,150.

The total amount of American lake tonnage is 106,836 tons. The total of British lake tonnage is 46,675 tons, making a combined tonnage of 153,411 tons.

CHILLICOTHE.

The chief town of Ross County, Ohio, and situated in the heart of the Scioto Valley, one of the richest valleys of land in the United States, is Chillicothe. Different in its origin from almost every other town in the State, having been mostly settled by Virginians, Kentuckians and "middle Pennsylvanians," it is distinguished for its refinement, hospitality and intelligence. On a lovely and extensive plain, embotomed on every side, save that through which the "clear Scioto winds its way," with lofty hills, it presents to the traveller a landscape surpassing in beauty any other point within the limits of the West. At no distant period it promises to be a large manufacturing city, as it lies in near proximity to the the vast fields of Coal and Iron in South eastern Ohio, a large portion of which must eventually find its way to this place by means of the projected Belpre and Chillicothe Rail Road, to pass directly through the mineral region. At present the only outlet of the rich valley in which Chillicothe is situated is the Ohio and Erie Canal, and through this communication all her exports are made. In addition to the table below exhibiting the trade of the city, for the past year, we may mention the fact that the value of "fatted cattle" driven this year to the Eastern cities for a market from the Scioto Valley, amounts to about one million dollars.

Statement of the Principal Items of Property received at and cleared from the port of Chillicothe, during the year.

RECEIVED.		CLEARED.	
Fish	446 brls	Flour	49,871 brls.
Salt, Ohio,	5,912 "	Corn Meal	3,094 "
" from O. R.	4,453 "	Pork	31,821 "
" N. Y.	2,687 "	Whiskey	543 "
Mineral Coal	131,150 bush.	Corn	196,780 bush
Wheat	56,422 "	Wheat	34,400 "
Furniture	97,323 lbs.	Butter	14,000 lbs
Cheese	40,953 "	Furniture	85,000 "
Coffee	444,974 "	Bacon	2,226,475 "
Cut Stone	153,645 "	Coffee	32,200 "
Crockery	83,072 "	Cut Stone	182,930 "
Gypsum	20,080 "	Crockery	15,400 "
Iron	239,800 "	Eggs	23,860 "
" Cast	54,000 "	Feathers	19,140 "
Maize	1,661,570 "	Hogs' Hair	96,760 "
Molasses	359,150 "	Iron	293,600 "
Nails	225,700 "	" Cast	42,700 "
Sugar	531,900 "	Lard	2,411,000 "

RECEIVED.		CLEARED.	
o - -	117,200 lbs.	Mdze - - - -	165,200 lbs.
ad - -	30,400 "	Molasses - - -	26,700 "
es - -	677,600 "	Nails - - - -	23,800 "
s (No.) -	24,280 "	Sugar - - -	60,800 "
Head -	415,637	Wool - - -	42,600 "
Wood -	1,102	Sundries - -	821,400 "
umber -	240,390	Feet Lumber - -	69,400

following remarks from the Chillicothe Gazette, evince a spirit which we not pervades the entire population of Ohio, in no lesser force than the citi- Chillicothe. The advantage of this State for maufacturing purposes have een impressed upon the minds of her people.

amount of Manufacturing Capital, apportioned to the above, and enough on to base a population of 20,000 people, with churches, schools, lyceums, apers, &c., to match, *might* be reckoned as follows :

150,000 in the manufacture of Woolens ;

200,000 in the fabrication of Cottons ;

75,000 in the making of Edge-tools ;

100,000 in miscellaneous manufactures, such as boots, shoes, sash, cooper- c., &c. We have the coal, provisions, site, water conveyance, &c., &c., these, and, what is very imporant, the market of consumers is all around Can there not be a combined effort made to divert a portion of the capital here into a business which cannot fail to be profitable, managed with due ice ? May not capitalists from abroad, with money seeking investment, be d to come here and put their money into a 12 or 15 per centum business?"

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take from a late number of the Free Trader some of the statistics ex- g the important branches of trade conducted at Natchez. As we have had an oppertunity before of collecting this information from any source, iblish it with very little condensation. Ought not the other cities of the to furnish us, in the same manner, their statistics ? Will any one furnish example, with a sketch of Memphis? We should be most delighted to h such matter for its manifest importance.

foundry of Wilkins, Humason & Co. give employ to 28 or 30 engineers, ers, blacksmiths, moulders and hands, and we are informed by one of the etors that a much larger amount of capital might propfitably be invested ning other branches of the business, such as the manufacture of plows, ws and other implements for plantation use. Wilkins, Humason & Co. orders for their gin house, sugar house, steam mill and steam boat machi- rom Baton Rouge and Donaldson on the Mississippi to Memphis, includ- l the plantations on the river bayous of western and northern Louisiana. se orders they are able to compete in price and in the perfection of their with the best foundrys of Cincinnati and Pittsburg—having besides the ad- ge of being able to send their own engineers to put the machinery in action, make the necessary repairs. They have on hand orders for five new engines.

Natchez Brass and Iron Foundry, owned by Mr. Maurice Lisle, is one of st complete establishments in the Southwest. Mr. Lisle, has had as many operatives in employ, at the same time in his foundry, He has orders for work he can do until next October, and will employ 25 or 30 hands.

the immediate vicinity of the foundry establishments another valuable n of manufactory, most important to the planting interest, is carried on— Gin Stand Manufactory" by Mr. Amasa Davis, long known and appreci- n this community, as one of the best Gin Stand builders in the South. Mr. gives employ to four or five workmen, and executes work annually to the nt of ten thousand dollars.

coachmaking and repairing business is carried on to some extent by the etors of the different carriage repositories of the Messrs. Clark & Lindsay, Dinkerman, Whitcomb and Valleau.

to the demand for carriages, wagon making to an equal amount should be d on here, as far more suitable to our wants and wishes than Pittsburg manufacture, patterned and fashioned for far different agricultural operations than are ever carried on in the Southern plantations. Almost a fortune could be made yearly in a wagon and wheel manufactory in Natchez, where any pattern could be made to the planter's order, and where the manufacturer would feel a pride in the lasting character and excellence of his work.

The wagon-making and wheelright business is carried on to some extent, in connection with their smithery, by Messrs. France & Bogart on Pine street; also the wood-work branch of wagon-making by Mr. Hoar on State street, and by Mr. Whitcomb on Main street,—yet by no means to that extent as to supply the demand and supercede exportation from Pittsburg and Cincinnati.

The two great saddle and harness making establishments of Natchez—that of Dicks & Waters on Main, and that of Livingston & Rountree on Franklin street—work about thirty hands, and turn out work of such excellence, splendor and cheapness, that no foreign competition is either feared by these gentlemen, or attempted by others—articles of Northern manufacture not even brought into Natchez as merchandise. The example, the success and rapidly accumulating fortunes of these gentlemen show what can be done in Natchez manufactures by practical and persevering capitalists.

In the tin, copper and sheet iron manufactory, the firms of Walker & Wev, Walker & Collins, and the Kennedys are doing a profitable business. The necessity of cisterns with tin pipes and conductors to all the edifices in Mississippi and Louisiana gives this branch of manufacture a firm and secure foundation.

The gun making business carried on in three manufatories, that of Fitzpatrick, Odell and Newcomb, is lucrative, employing from three to six artificers in each, and, we are informed by one of the gentlemen, that many more could be employed in the manufactories if good workmen could be found.

The establishments of Messrs. Profilet, Cockrell, David, Macmichael, Colton and Macpherson employ several jewellers with a good return of profit; and the bindery and blank book manufactory is successfully conducted at Major R. Elward's establishment on Main street.

The largest blacksmithing establishments employ from four to six hands each, and finding full and lucrative employ, are those of Messrs. Krizer, Donan, McCaffrey and Bogert.

The leading boot and shoe manufactories (and there are none more celebrated in any city) are those of Messrs. Swain, Hughes Essig and Batterson.

The manufacture of gentlemen's clothing is carried on by several firms in the Parisian, the Broadway or the St. Charles street, while some of the larger clothing stores are furnished with garments and order, made at the shops of New York, Boston and Philadelphia.

The mostof the bricks used for building in the city and county are made at the extensive yards of Messrs. Grove, Reynolds and Fox, where from eight to fifteen hands are employed, and any order for brick work can be instantly filled and executed.

The steam saw-mill of Brown Cozzens, at the Middle Landing, employs ten hands, works the engine from 5 in the morning to 8 in the evening, fifteen hours each day, and turned out, during the year 1847, a little over eleven hundred thousand feet of boards and sawed lumber of all kinds, averaging in price eighteen dollars per thousand—making a total of $19,800 worth of work in a year.

The engine of Andrew Brown's splendid mill is in action fourteen hours each day, and its various operations employ from forty to fifty hands, producing a daily average of 15,000 feet of all kinds of lumber, or four millions five hundred thousand feet in a year. The lumber turned out at this mill is of such value that its average price is twenty-five dollars per thousand, amounting, by actual sales, during the year 1847, to *fifty-six thousand dollars*, with an increase of stock on hand of half a million feet of sawed lumber. One half of the above sum, or $28,000, was a clear profit over and above all expenses—a sum larger than that produced by any two of the best plantations in the State.

The shingle making and wood business along shore, at and near the various landings, probably employs from fifty to sixty hands all the year round.

The plough making business is successfully carried on here a part of each year by Capt. Wood, of Maysville, Kentucky, who has eight or ten workmen employed on a flat-boat, and gives great satisfaction to planters by his manufacture of choice ploughs and harrows.

is also a pottery establishment at the Upper Landing, in faubourg Brown,
g several hands, at least a part of the year.
tton factory in Natchez, against Lowell, has only to contend with the
ice of fuel in the propulsion of the steam engines; against which we
the transportation of the raw material three thousand miles, with the
arges of brokerage, storage, factorage; the transportation of the wrought
ick again, to which the merchant's profits are to be added. All these
ll make fifteen per cent. in favor of Natchez manufacture, especially
as been conclusively proved by experiments in the : tates of Georgia and
that young negroes, of both sexes, can be as readily learned the business
ofitably employed in this as in any other department of labor.
chez there are four hundred householders, the most of whom are identi-
its fortunes, and have made the beautiful and healthful locality a life-
e. There are also merchants of high, unimpeachable character, whose
ows as free as water for the promotion of any public charity, for the pro-
f morals, religion, or education. During the last year, the trade of
merchants, embracing only their sales of merchandize, amounted to *one*
e hundred and nineteen thousand eight hundred and six dollars !
ld be evident to all that the mercantile business of Natchez cannot be
farther; the only hope for the future expansion and prosperity of the
n the manufacturing interest. Here is our hope—the sheet anchor of
ccess—the security that the magnificent scheme of free educatio.. so
instituted in Natchez, shall be carried out in full consummation, while
all reign in its homes, and happiness dwell in each bosom !

SOUTHERN RAILROADS.

ıbjoin a statement of the principle railroads in the Southern
ogether with the cost of travel on each. Several works are in
which will materially extend the lines. When these are accom-
we shall endeavor to exhibit the cost and dividends, as well as
ecific information concerning all.

ompanies.	Miles.	Fare.
	In Alabama.	
ıery and West Point, - -	60	$3 00
	In Georgia.	
and Atlantic, (State) -	100	5 00
- - - - - -	171	7 00
- - - - - -	191	7 00
Vestern, - - - -	101	4 00
	563	
	In South Carolina.	
rolina, - - - - -	136	6 75
- - - - - -	68	3 38
	204	
	In North Carolina.	
ton and Welden, - -	161	5 00
nd Raleigh, - - -	87	4 00
	248	
	In Virginia.	
g and Roanoke, - -	63	3 00
1 and Petersburg, - -	22	1 00
1, Fredericksburg and Potomac,	133	5 50
ter and Potomac, - -	32	2 00
- - - - - -	50	4 00
	300	

There is no reason why the stock of Southern railways should n [illegible]. As a specimen, we take the report of the President of Petersburg Railroad Company, for the year ending 30th September l

Total receipts for passengers and freight, - - -	$179,867
Expenses of every kind, repairs, &c. - - -	73,637
Income after payment of expenses. - - - -	$106,23

The cost of the road was $461,611 52—the dividend, therefore, fraction over 23 per cent.

In his late report, the President of the South Carolina Railroad C pany sums up the operations of the year:

Gross receipts from 1st Jan'y. to 31st Dec., 1847, -	$655,57
Current expenses in same period, - - - -	303,
Nett revenue. - - - - - - - -	$352,0

AMERICAN COPPER AND IRON ORES.

Until within a few years, copper formed little or no part of the mi business of the U. States. Now, the yield is immense. About 120 panies, with a capital of more than $4,000,090, are reported for oper in the district of Lake Superior. The mineral agent has given the qu of ores and metals raised and shipped during the year ending 30th last, by the following companies:

	Ores and metal.	Am't S
Lake Superior Company, - -	1,114,841 lbs. - - -	3
Eagle Harbor Company, - -	321,000 - - -	6
Copper Falls Company, - -	317,050 - - -	1
Pittsburg and Boston Company,	7,263,340 - - -	1,49
North West Company, - -	190,000 - - -	
Lac La Belle Company, - -	200,000 - - -	
Suffolk Company. - - -	300,000 - - -	
Algonquin Company, - -	120,000 - - -	1
Bohemia Company. - - -	80,000 - - -	
All others making reports, - -	1,327,969 - - -	4
	10,214,200 - - -	1,6

Four smelting works were in the course of erection, to be ready th season. The mineral resources of the North West are, we are grati perceive, in progress of rapid developement, and will greatly increa exports, besides doing much for home consumption.

It would be interesting and valuable to show the yield of the country,—the iron of Pennsylvania, Missouri, and other rich States. At a future day, when materials for this purpose can be h shall aim to collect and publish full tables on the subject.

As curiosity prevails to know the relative proportions between and pig copper, we refer to the foundry of Messrs. Hooper & Co., B where thirty-two masses of native copper, with some rock att weighing from 115 to 2353 lbs. each, and ten barrels and eleven half-b of the same material in small pieces, were cast into the furnace wi following result:

Weight of the native copper, as received, was	36,100 pounds.
Nett weight of pig copper, - - -	27,314
Leaving, in slug and waste, - - -	8,786

It is seen that the yield was upwards of 75 per cent. of met result creditable to the furnace, and satisfactory to those interested i mine.

THE COAST SURVEY.

The report of the Superintendent of the Coast Survey, reached us a few weeks ago, and it gives us much pleasure to notice in our number, the rapid progress which this great national work, is making under the direction of the present indefatigable and distinguished superintendent, Professor Alexander Dallas Bache.

This gentleman visited our city last spring for the purpose of personally superintending the operations and survey of the eighth and ninth sections of this great work extending from Dauphin Island to Galveston Bay.

We had then ample opportunity of witnessing the zeal with which he pushed the work in this important section of the Coast Survey, until the summer heat compelled him to go north, where he was engaged the remainder of the year on the eastern section.

The coast of the United States is divided into nine sections of nearly equal extent of shore line :

No. 1. From Passamaquoddy bay to Point Judeth.
2. From Point Judeth to Cape Henlopen.
3. From Cape Henlopen to Cape Henry.
4. From Cape Henry to Cape Fear.
5. From Cape Fear to St. Mary's River.
6. From St. Mary's to St. Joseph's Bay.
7. From St. Joseph's Bay to Mobile Bay.
8. From Mobile Bay to Vermillion Bay.
9. From Vermillion Bay to the boundary of Texas.

Up to 1844, the operations of the Coast Survey had only been extended to nine States, while now it embraces eighteen States, including three on the Gulf of Mexico.

In every section the methods are the same, so that the results brought to Washington are published in detached parts to meet the urgent demand for information, which the accurate system and frequent discoveries of the Coast Survey create.

The number of sheet maps and charts now published is sixteen; and in the course of this year at least five more will be added.

Although the most valuable results of the Coast Survey are the furnishing of accurate maps and charts, at first cost, the superior execution of which reflects great credit upon the gentlemen employed in this department by the government, yet these are not the only results obtained from year to year, which attest the importance of fostering this branch of public service in a commercial point of view.

The discoveries of Gidney's channel into New York harbor; of Blake's channel in Delaware Bay, the new shoal near the island of Nantucket, and a new channel of twenty feet at the entrance of Mobile bay, are among those not the least important that have saved to the commerce of the United States more than a thousand times the expense of making the Coast Survey.

We regret we have not space to bring to the notice of our readers all that has been accomplished in the eighteen States, we shall therefore be obliged to close this article by stating what has been done during the past year in the Mississippi sound. In this section a base line has been measured on Dauphin Island; the primary triangulation has been continued by filling up at stations not already occupied; the secondary triangulation has been carried westward to Cat Island and the subjacent shores. The topography of the entrance to Mobile bay, and part of the Island chain from Mobile bay to Lake Borgne, has been executed; the hydrography of the *entrance to Mobile bay* is being nearly completed, and that of Mississippi sound north of the base is in progress. A survey of Cat island harbor for the accommodation of shipping and the British mail line of steamers in connexion with the Mexican Gulf railway has been completed, operations too have recently commenced in Galveston bay and harbor.

These taken together with the new channel round Dauphin island the still more important discovery of a deeper channel into Mobile bay, the establishment of a harbor at Cat island, are but the beginnings of more brilliant prospects for the local and general commerce in the Gulf.

J. D. B. De Bow, Esq.

Dear Sir:—Knowing that all information relating to the cultivation of the cane, or manufacture of sugar, will be read with interest by very many of the subscribers to the Commercial Review, I annex extracts from a letter recently received from J. Balestier, Esq., our Consul at Singapore, who, ten years ago, opened a plantation on that island, after having resided many years in the West Indies. The different results from variety of soil, climate, and method of tillage, offer some plain deductions to practical men, and which may prove serviceable to all.

I remain respectfully yours, &c., L. B. S.

New Orleans, March 20, 1848.

"In Singapore, every thing is done by hard labor. I am the only one who has the plow in use, and it is drawn by three small bullocks of the country, or large Sydney horses, and, for the first time, an elephant has recently been put to that use, and he is a far better and more effective worker than the other animals.

"I will just run over our mode of cultivation, premising that our coolies are natives of China and natives of India, (Madras,) who are engaged for a year at three and three and a half dollars per month, but found in nothing. They work in the field from 6 to 11, A. M., and from 1 to 6, P. M.; Sundays, half a day only, and are allowed five holidays per year.

"The top pieces of the cane, after being gathered from the field, are first trimmed and then laid up and down, straight, in shallow pits, dug for the purpose in convenient places in the field to be planted, the old ridges of which have been previously pared down with hoes. After the pit is full of plants, the earth round the sides is raised, and the top surface is sheltered from the burning sun by a thick coating of mould, or mud, if to be had, and water, if needed, thrown on the mud twice a day. In ten or twelve days, every eye has sent out a fine shoot, and the plants are then taken out and carried in baskets, Chinese fashion, and planted in shallow drills, six feet apart, prepared also with hoes over the old drills. By this mode not a plant is lost, and in the forwardness of the young cane nearly a whole month is gained, which I should think would be a great gain in Louisiana, where the season is short. Six months after planting, burnt ground, and ashes, which have been prepared in and about the field, by clearing the old roots, leaves and grasses, are carried in baskets, and about two large handsful dropped from the basket on the end of the plant next to the young shoots; a month later, the grass and weeds in the drills are hoed, allowed to dry, and drawn against the plants, and covered over with mould. Two months later, the same operation is performed, which is renewed again when the cane is six months old, and then the first stripping takes place. The dry leaves are detached, made up into snug bundles, which are deposited between the canes, and covered over by a very high banking of mould to prevent the canes falling and not ripening. In twelve or thirteen months, they are fit for cutting, and are again stripped.

"Rattoons are treated precisely in the same manner, excepting that the banks are removed from the roots, in order to allow shoots to come out freely, and they are fit for the mill in ten or eleven months.

"In my individual case, of course the plow greatly supercedes the hoe, but not to the extent it appears to do with you, and in this I should like to be instructed. Our soil consists of adhesive yellow clay, or of peat, and to be productive, requires a good deal of working. I find that one plant does full as well as two or more, and each stole consists of eight or ten good canes. My plants are not *planted*, but are laid *flat* in the drills, the eyes on either side. Our cane-juice marks from 9 to 10° of Beaume's saccharometer, and is very easily clarified with lime; but I merely use cold water, sprinkled over the boiling liquor from a watering pot, which causes the impurities to rise without injuring the color and the graining of the sugar, as lime does. I use cream of lime in the first place, and after filtration in a very unsatisfactory manner, use the watering pot.

"In this country, cane-juice has very little tendency to acidify, for the pans are never emptied at night, but the boiling carried on only while the mill works, during day light. On a recent occasion, my mill was stopped on a Wednesday, with a large stock of canes in the shed, which remained there until the following Tuesday, when they were ground for rum-making, as I thought; but to my surprise, the sugar from them was as beautiful as that usually made on the estate; the thermometer, meanwhile, from 76° at night to 83° at noon, as usual.

"Your people waste large sums in wood fuel, which they could save, if they would deposit, arranged in long ridges, say six feet high, their expressed canes of one year's grinding, which, if their coppers are properly set, will give them ample fuel for the next crop, and so on from year to year. Here we plant and make sugar the whole year, and six months after my expressed canes are carried under my bagass shed, I have far better bagass than that dried in the sun. If the locality is damp or wet, a grillage of timber raised a few feet will remove the difficulty of drying, for a free circulation of air is more necessary to make fuel than the heat of the sun.

"The newspaper reports of the production of sugar in your State, are certainly surprising, if true—6,000 pounds per hand, while, as by government report for the Island of Java, 2,440 men produced only 600,000 pounds of sugar from 4,000 acres of land. The laborers are paid one cent and a half of a Spanish dollar per day, but well can the Louisiana planter afford to pay $1,000 per hand, and find him beside, at the rate he produces."

EXCHANGE ON ENGLAND—VALUE OF A POUND STERLING.

As quotations of English exchange are so often looked to, and generally so little understood, the following table may be of service:

The value of a pound sterling in federal money,

At 7	per cent. premium, is	$4 75	At 9	per cent. premium, is	$4 84
7¼	"	4 76	9¼	"	4 85
7½	"	4 77	9½	"	4 86
7¾	"	4 78	9¾	"	4 87
8	"	4 80	10	"	4 88
8¼	"	4 81	10¼	"	4 90
8½	"	4 82	10½	"	4 91
8¾	"	4 83	10¾	"	4 92

When exchange is 10 per cent. and over, it will cause a shipment of specie, as *the freight,* insurance, and interest will not amount to so much *as the cost of exchange.* When exchange is 10 per cent. and under, *English funds are not* worth par in New York.

UNITED STATES IMPORTS, EXPORTS, TRADE, ETC.

From the last able report of Secretary Walker we make up the following most invaluable tables.

IMPORTS, EXPORTS, U. S., 1846 and 1847 to June 30.

	Exclusive of Specie.	Specie.	Total.
1846			
Imports	$117,914,065	$3,777,732	$121,691,797
Foreign exports	7,865,206	3,481,417	11,346,623
	110,048,859	296,315	110,345,174
1847			
Imports	$122,424,349	$24,121,289	$146,545,638
Foreign exports	6,166,039	1,845,119	8,011,158
	116,258,310	22,276,170	138,534,480
Domestic exports.			
1846	$101,718,042	$423,851	$102,141,893
1847	150,574,844	62,620	150,637,464

STATEMENT OF COMMERCE, REVENUE, AND POPULATION OF THE UNITED STATES FROM 1790 TO 1847.

	IMPORTS*		EXPORTS.		
Years	Total imports	consum. in U. S.	Domest. Produce	For merch.	Total imports
1790	$23,000,000	$22,460,844	$19,666,000	$ 539,156	$20,205,156
1791	29,200,000	28,687,958	18,500,000	512,041	19,012,041
1792	31,500,000	29,745,902	19,000.000	1,753,099	20,735,098
1793	31,100,000	28,990,428	24,000,000	2,109,572	26,109,572
1794	34,600,000	28,073,767	26,500,000	6,526,233	33,026,233
1795	69,756,000	61,266,796	39,500,000	8,489,472	47,989,472
1796	81,436,164	55,136,164	40,764,097	26,300,000	67,064,097
1797	75,379,406	48,379,406	29,850,206	27,000,000	56,850,206
1798	68,551,700	35,551,700	28,527,097	33,000,000	61,527,097
1799	79,069,184	33,546,148	33,142,522	45,523,000	78,665,522
1800	91,252,768	52,121,891	31,840,903	39,130,877	70,971,780
1801	111,363,511	64,720,790	47,473,204	46,642,721	94,115.925
1802	76,333,333	40,558,362	36,708,189	35,774,971	72,483,160
1803	64,666,666	51,072,594	42,205,961	13,594,072	55,800.033
1804	85,000,000	48,768,403	41,467,477	36,231,597	77,699,074
1805	120,600,000	67,420,981	42,387,002	53,179,019	95,566,021
1806	129,410,000	69,126,764	41,253,727	60,283,236	101,536,963
1807	138,500,000	78,856,442	48,699,592	59,643,558	108,343,150
1817	99,250,000	79,891,931	68,313,500	19,358,069	87,671,563
1818	121,750,000	102,323,304	73,854,437	19,426,696	93,281,139
1819	87,125,000	67,959,317	50,976,838	19,165,683	70,142,521
1820	74,450,000	56,441,971	51,683,640	18,008,029	69,691,669
1821	62,585,724	43,696,405	43,671,884	10,824,429	64,974,382
1822	83,241,541	68,395,673	49,874,079	11,476,022	72,160,281
1823	77,579,267	51,310,736	47,155,408	21,170,635	74,699,030
1824	80,549,007	53,846,567	50,649,500	18,322,605	75,986,657
1825	96,340,075	66,395,722	66,844,745	23,793,588	99,535,388
1826	84,974,477	57,652,577	52,449,855	20,440,834	77,595,322
1827	79,484,068	54,901,108	57,878,117	16,431,830	82,324,827
1828	88,509,824	66,975,505	49,976,632	14,044,578	72,264,686

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* Exclusive of specie.

Imp. specie.	Exp. specie *	Nett revenue.		Tonnage.	Population.
- -	- - ‡	- -	-	478,377	3,921,326
- -	- - -	$ 4,399,473	09	502,146	
- -	- - -	3,443,070	85	564,457	
- -	- - -	4,255,306	56	520,764	
- -	- - -	4,801,065	28	628,618	
- -	- - -	5,588,461	26	747,965	
- -	- - -	6,567,987	94	831,899	
- -	- - -	7 549,649	65	876,913	
- -	- - -	7,106,061	93	898,328	
- -	- - -	6,610,449	31	939,409	
- -	- - -	9,080,932	73	972,492	5,318,762
- -	- - -	10,750,778	93	947,492	
- -	- - -	12,438,235	74	892,104	
- -	- - -	10,479,417	61	949,172	
- -	- - -	11,098,565	33	1,042,404	
- -	- - -	12,936,487	04	1,140,368	
- -	- - -	14,667,698	17	1,208,736	
- -	- - -	15,845,521	61	1,268,548	
- -	- - -	26,283,348	49	1,399,912	
- -	- - -	17,176,385	00	1,225,185	
- -	- - -	20,283,608	76	1,260,751	
- -	- - -	15,005,612	15	1,280,167	9,654,596
$8,064,890	$10,478,059	13,004,447	15	1,298,958	
3,369,846	10,810,180	17,589,761	94	1,324 699	
5,097,896	6,372,987	19,088,438	44	1,336,566	
8,379,835	7,014,552	17,878,325	71	1,389,163	
6'150,765	8,797,055	20,098,718	45	1,423,112	
6,880,966	4,704,533	23,341,231	77	1,534,191	
8,151,130	8,014,880	19,712,283	29	1,620,608	
7,489,741	8,243,476	23,205,523	64	1,741,392	
7,403,612	4,924,020	22,681,965	91	1,260,798	
8,155,864	2,178,773	21,922,391	39	1,191,776	12,866,520
7,305,945	9,014,931	24,224,441	77	1,267,847	
5,907,594	5,656,340	28,465,237	24	1,439,450	
7,070,368	2,611,701	29,032,508	91	1,606,151	
17,911,632	2,076,758	16,214,957	15	1,758,907	
13,131,447	6,477,775	19,391,310	59	1,824,940	
13,400,881	4,324,336	23,409,940	53	1,882,103	
10,516,414	5,976,248	11,169,290	39	1,866,656	
17,747,116	3,508,046	16,158,800	36	1,995,640	
5,595,176	8,776,743	23,137,924	81	2,096,479	
8,882,813	8,417,014	13,499,502	17	2,180,764	17,069,453
4,988,633	10,034,332	14,487,216	74	2,130,744	
4,087,016	4,813,539	14,260,770	95	2,092,391	
7,440,112	506,930	3,927,137	81	2,174,862	
14,880,223	1,013,861	7,046,843	91	2,158,603	
5,830,429	5,454,214	26,183,570	94	2,280,095	
4,070,242	8,606,494	27,528,112	70	2,417,002	
3,777,732	3,905,268	26,712,667	87	2,562,085	
24,121,289	1,907,739	23,747,864	66	2,839,046	

Including American Coin.

To December 31st, (3 months.)

† To September 30th.

§ January 1st to June 30th, (6 months.)

THE SHIP CANAL.

FROM THE ATLANTIC TO THE PACIFIC.

An Ode to the American People and their Congress, on reading the Message of the United States President in December, 1847.

Rend America asunder
And unite the Binding Sea
That emboldens Man and tempers—
Make the ocean free.

Break the bolt which bars the passage,
That our River richly pours
Western wealth to western nations;
Let that sea be ours—

Ours by all the hardy whalers,
By the pointing Oregon,
By the west-impelled and working
Unthralled Saxon son.

Long indeed they have been wooing
The Pacific and his bride;
Now 'tis time for holy wedding—
Join them by the tide.

Have the snowy surfs not struggled
Many centuries in vain
That their lips might seal the union?
Lock then Main to Main.

When the mighty God of nature
Made his favored continent,
He allowed it yet unsevered,
That a race be sent,

Able, mindful of his purpose,
Prone to people, to subdue,
And to bind the lands with iron,
Or to force them through.

What the prophet-navigator,
Seeking straits to his Catais,*
But began, now consummate it—
Make the strait and pass.

Blessed eyes that shall behold it,
When the pointing boom shall veer,
Leading through the parted Andes,
While the nations cheer!

---

* Catais and Zipango were the names given to the eastern part of Asia, towards which the greatest of navigators directed his westerly voyage, as Marco Polo had reached it by an eastward journey. Columbus having found that a continent debarred him from continuing his westward course, persevered in searching for straits which would allow him a passage to his wished-for Catais.

There at Suez, Europe's mattock
Cuts the briny road with skill,*
And must Darien bid defiance
To the pilot still?

Do we breathe this breath of knowledge
Purely to enjoy its zest?
Shall the iron arm of science
Like a sluggard rest?

Up then, at it! earnest people!
Bravely wrought thy scorning blade,
But there's fresher fame in store yet,
Glory for the spade.

What we want is naught in envy
And for all we pioneer;
Let the keels of every nation
Through the isthmus steer.

Must the globe be always girded
Ere we get to Bramah's priest?
Take the tissues of your Lowells
Westward to the East.

Ye, that vanquish pain and distance,
Ye, enmeshing Time with wire,
Court ye patiently for ever
Yon Antartic ire?

Shall the mariner for ever
Double the impeding capes,
While his longsome and retracing
Needless course he shapes?

What was daring for our fathers,
To defy those billows fierce,
Is but tame for their descendants;
We are bid to pierce.

We that fight with printing armies,
Settle sons on forlorn track,
As the Romans flung their eagles,
But to win them back;

Who, undoubting, worship boldness,
And, if baffled, bolder rise,
Should *we* lag when grandeur beckons
To this good emprise?

Let the vastness not appal us;
Greatness is thy destiny.
Let the doubters not recall us;
Venture suits the free.

---

ish, French, and Austrian engineers have actually set out to commence
canal through the Isthmus of Suez.

Like a seer, I see her throning,
Winland* strong in freedom's health,
Warding peace on both the waters,
Widest Commonwealth—

Crowned with wreaths that still grow greener,
Guerdon for untiring pain,
For the wise, the stout, and steadfast:
Rend the land in twain!

Cleave America asunder,
This is worthy work for thee.
Hark! The seas roll up imploring—
"Make the ocean free."

AGRICULTURE OF FRANCE.

BY W. W. MANN, OF PARIS, FRANCE.

Agriculture is the basis of all the Arts. It lies at the foundation of human improvement: and its state among a given people may be said to afford the measure of its civilization. If one man by his sole labor can provide from the earth subsistence for three, two are left at liberty by a different application of their labor to procure for common use the comforts and luxuries of life: to practise and perfect, by exclusive attention to them, the useful and elegant arts; to effect the exchanges of commerce; to ameliorate political, civil, and social institutions: and to provide for the intellectual wants of man, by the cultivation of Literature and Science. A defective state of Agriculture in which every man, or nearly every man, is occupied with the care of supplying his own food, must abstract largely from the nber of persons engaged in these humanising pursuits, and evidently ard in an equal ratio, the advancement of society.

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* May I not for once bestow upon our nameless country this good and plain Saxon name, which was given to it by its first and Teutonic discoverers, long before Columbus and Vespucci? The poet, and all who desire to speak with fervor and pregnant brevity, stand in need of a name more comprehensive and concise than that which conveys the idea of a mere political relation. Above all, they stand in need of a name for the country, and not only of an official designation, however honorable or historical—a name around which cluster associations of the heart as well as of political and international transactions. When the heroic Nelson felt that he must animate his fleet to the highest pitch of battle-work, his signals did not proclaim "The United Kingdom of Great Britain and Ireland, or, His Majesty King George the Third, expects every man to do his duty," but the flag-ship signalled: "England this day expects every man to do his duty;" and in that brief dissylable, *England*, centred every thing that could stir the men and swell the breasts of officers—honor, wives, sweethearts, Parliament, newspapers, fields, farms, fox hunting, peerage, habeas corpus, brown stout, pudding, Christmas merriment, and all. Columbia, which had become in some sort the poetic name for the United States, is not sufficiently specific; and Alleghania, which has been proposed, has, besides its unwelcome similarity with alligator, a character of newness without freshness, like whitewashed walls or a shining hat. It sounds *made*, and as if made, too, for a school geography; yet, why should we take even a book-name from that small and very partial ridge of hillocks? We have gone too far beyond. The name of Winland, on the contrary, is old, idiomatic, simple, and requires only to be resumed; it would adapt itself to *all* the needed grammatical formations (or, as the late Mr. Duponceau would finely have said, is malleable); it is brief, and seems every way sound.

The end of Agriculture being to increase the amount of useful products n the earth, its perfection consists in obtaining the greatest amount h the least cost. The actual productive capacity of an acre of land is bably unknown. Its maximum product has not yet been reached. Rets surprising indeed have been attained: but in reference to none of them y it be averred with confidence that nothing more could have been ected. For agricultural improvement is lamentably slow in its progress. e application of science to an art which in the eyes of most farmers pears so exclusively practical is regarded with distrust, and scientific ggestions of most unquestionable utility are sneered at as the advice of ok-farmers. Much must doubtless be put down to the account of want education among the agricultural classes, to honest ignorance and prejuce, its child: much to a disinclination among farmers to disturb establish- habits, and depart from a time-honored routine under the reign of which ey and their fathers have gotten along with tolerable comfort. "Let ell enough alone," they say. These men who in full view of the railay which conveys to market with so much celerity and convenience the oducts of their neighbor, are themselves content to toil over the hills and all in the mud of the ancient country road, "Mine fader haf been always avel along dis road and so I travels here too." But perhaps the chief use preventing the prompt general adoption of improvements discovered d recommended by scientific men is to be found in the limited capital of ost farmers, which, already charged to its full extent, is unequal to the pense in which the substitution of new methods would involve them. hus, proposed scientific improvements which have notoriously passed from e doubtful domain of experiment and taken place among well ascertained cts, are rejected under the empire of that stern necessity which leaves the rmer no choice between immediate moderate returns which may be made suffice, and the large returns which he admits would ultimately reward change of system.

All these causes and particularly the last, owing to the minute subdivisn of landed property, of which we shall have occasion to speak presently, oncur to render the grand results of Agriculture in France much inferior those of some other countries less favored by nature. Its territory is rice that of England, its population double, its soil and climate more enial, yet the agricultural products of France are estimated at but oneird, perhaps only one-fourth those of England. The difference is astonhing and is due exclusively to the superior modes of tillage which obtain that island, and which probably render it in certain localities where faorable circumstances combine, the seat of the most perfect agriculture hich the world has ever witnessed. Statistical writers usually announce the gricultural population of France as forming three-fourths of the whole. ut M. Chemin Dupontes who is quoted as the best authority upon this ubject, states the actual number of persons engaged in agricultural puruits to be 22,000,000, which is considerably less than three-fourths. It calculated that the labor of each individual suffices for his own subsistnce and leaves a surplus equal to the fourth or at most, the third of the ubsistence of one other person. It appears too, considering the whole opulation, and the area of land under cultivation, that in the present state f agriculture it requires an average of 3 7-10 acres for the support of a ingle person. The department of the *North* and of the *Lower Rhine* which contain a much denser population than this would imply, form in fact no exception to the rule. In these departments notwithstanding their fertility, production is never equal to consumption, and they draw from abroad a portion of their subsistence. These are deplorable results and

in view of the demands of an increasing population, may well exci
serious concern of the patriot. Agriculture must improve, and e
vastly superior productive energy than at present, or France will be
dependent, and year by year increasingly dependent, on foreign sour
her daily bread.

A glance at the map of France and a moment's consideration o
physical characteristics, will suffice to prove that this country has b
richly endowed by nature and ranks among the most favored parts of
rope. Its northern extremity on the base of the Pyrenees falls in 4
30 min. N. lat. the northern beyond Dunkirk in 51 deg. 10 min. a
in length, eight and a half degrees of latitude. Its breadth from 8
deg. 20 min. E. of Greenwich to 4 deg. 40 min. W. extends over th
degrees of longitude. This gives dimensions nearly square of 58
from north to south, and 550 from east to west, an area of about 2
square miles, or rather more than 130 millions of acres. The ferti
of its soil is hardly second to that of any part of Europe and its g
climate fits it for the growth of a rich variety of northern and sou
productions.

Till late years only ill-directed and imperfect efforts had been ma
ascertain the variety and aggregate amount of the agricultural weal
France. Since the revolution of 1830 however, the old modes have b
laid aside and a new method adopted, more tedious and difficult, but m
efficient and satisfactory for furthering the real basis of agricultural st
tics. The bureau of general statistics which was charged with the
of remedying this evil, addressed to the mayors, public officers, and
principal citizens of all the 37,040 communes of France, so many co
of a table drawn up on a simple and uniform plan, requesting them to
the blanks with the proper information and return the table to the off
in Paris. By these means immense masses of local information were c
lected, which was submitted, first, for revision and verification, to commi
tees of each canton: this being the next territorial division of Fran
larger than the commune. Having passed through the 2,846 cantons o
the kingdom it was submitted, for further arrangement and abridgement, t
the 363 arondissements. Thence it passed into the hands of commi
sions in the 86 Departments from which it has been received, a complete
digested and reliable body of valuable French statistics. This syste
atic plan was commenced in 1836, and the public has been for some ti
in possession of the results. Departmental inspectors of Agriculture a
charged with continuing the work; it is their duty to keep the governme
in constant possession of important agricultural statistics. It is from th
source that most of the figures in the present article will be drawn.

A distinguished writer, Lallin de Chateauvieux divides France into
distinct agricultural *regions*, viz: North, Northeast, Southeast, Centr
West Central, Southwest, and the Lande or heaths. Before giving
rapid sketch of these *regions*, describing briefly their characteristics, the
productions, and the modes of culture which prevail in them, a passi
notice, must be taken of the minute subdivision of landed property whi
is, in a greater or less degree, common to all of them, and is every whe
attended with deplorable consequences to the general interests of agric
ture. "It is," says the writer mentioned above, "the characteristic featu
of the rural economy of France. It is the immense fact which curtails
ameliorating measures and all circumstances. It classifies the nation a
impresses upon it an agricultural character which the efforts of commer
and the struggles of industry are impotent to remove." This division
the soil of France into 123,360,338 distinct parcels, belonging to abo
11,000,000 proprietors, is the work of the French Revolution. Which
the great cardinal and saving ideas, political, religious, or social, upon th

comprehension of which rest the hopes of the human race, that was eized upon and carried to wild extremity amid the excesses of that ible reaction?—that did not become noxious and almost odious in the mpts which were made at practical development. Thus the doctrine the interests of agriculture, and the welfare of the state would be tly promoted by the breaking up of the feudal system, and the creation large class of free proprietors of the soil, was illustrated in France orcelling the territory to the almost incredible extent above mentioned, distributing it in ruinously unequal portions among 10,896,682 free prietors. During the last ten years of the nineteenth century, national ains to the amount of $502,262,500 were sold. These were mostly tes of the church and of the religious orders, which, with the nobility, essed, prior to the revolution, nearly the whole of the landed property. ese estates were generally sold at very low prices, partly because not ch confidence was had in the newly acquired titles: and partly because re were not many buyers capable of paying the full value of the land. e following table will present at one view, the distribution of territorial perty in this kingdom at the commencement of the present reign, and tially disclose the magnitude of the evil complained of—an evil as great, haps, so far as the mere interests of agriculture are concerned, as the er extreme from which they so precipitately fled. Proprietors are divided o eight classes according to the amount of the land tax with which their perties are burdened. The four first comprise what are known as the *large* *perties* paying at least 200 francs ($38 50) annual taxes: the 5th and 6th sses, paying a minimum annual tax of 50 francs, ($9 62½) comprise the *dling properties:* the 7th and 8th classes charged with a tax of from one t to $8 12½, comprise the numerous *small properties.*

sses of prietors.	Minimum of taxes.	Number of proprietors.	Average size of estates.	Total acres per class.		Acres.
t clas .	$192.50	8,000	877¼ acres	7,018,000	Large proper-ties.	42,816,500
“	96.25	15,000	444 8-10 “	6,672,000		
“	57.75	67,000	207½ “	13,902,500		
“	38.50	110,000	138 2-5 “	15,224,000		
“	24.06¼	220,000	86¼ “	19,030,000	middling proper-ties.	35,638,000
“	9.62½	480,000	34½ “	16,608,000		
“	4.81¼	3,900,000	9 1-50 “	11,500,000	small pro-perties.	35,198,00
“	01			23,698,000		
		4,800,000		113,652,500		113,652,500

The above table however, exhibits very imperfectly the extent to which e morcelling system is carried in France. It does not explain the more n 123 millions of fractions into which the territory of the kingdom is di- ded. In fact the properties designated in the table as *large* and *middling* e themselves broken up into numerous small fragments: to the effect at a wealthy man's land lies so split up into small parcels, and often at ch distances from each other, that if he deemed it necessary to have the hole under his personal supervision, his whole time would be taken up in oving from one portion of his estate to another. A man's property lies attered over the whole arondissement so that one of the larger proprietors s in some portion of his estate almost every other proprietor of the de- rtment as his neighbor. The inconvenience of this state of things and s hindrance to productive cultivation are evident at a glance. Parcels at distance may not be exchanged for others lying nearer home, because the xpenses attendant upon the transfer of real estate, in the shape of stamps, conveyancer's fees, recorder's fees, &c., are so onerous that for conv a lot, yielding only two or three dollars a year, in raw produce, the p would have to pay nearly twenty dollars in fees!

Side by side with the "large," "middling," and "small" *properties*, nected with and immediately flowing from this fragmentary conditi the French territory are observed different modes of cultivation kno the names of the *great*, *middling* and *small culture*.

The great culture as its title would imply is that which is conducted a grand scale on a large body of land. Numerous hired laborers a ployed occupying separate quarters and having no connection with the ly of the proprietor. *The middling culture* is effected for the most p the sole labor of the farmer and his family. The hired laborer howe occasionally called in. A single plow is seen upon the farm; but vision of labor takes place. *The small culture* is carried on with use of the plow, by the manuel labor of the farmer and his family.

Taking no note of the woodlands, the following is given as the pro in which the land is distributed among these three systems of cultiv

Small culture.	To the cultivation of the vine	Acres	13,344,172	A
	Mountainous districts	"	11,120,144	40,
	Very small properties	"	15,988,295	
Middling culture.	Estates taxed at from $4.81¼ to 9.62½	"	13,344,172	
	Farms cultivated by *metayer*,*	"	35,831,574	53,
	Cultivated by small parcelling farmers	"	3,706,714	
Great culture		"	15,148,107	15,
				108,

We are now prepared for a rapid glance at the 8 grand *agricul gions* into which Lullin de Chateauvieux divides the surface of Fra shall not detain us long from the presentation in tabular form of th ty, amount and value of the productions, which under the unpropit cumstances to which we have been alluding they are made an yield.

The *Region of the North* opens a vast field for the growth of bre vegetables and the grasses. Its climate is moist and its soil gen great fertility consists of sandy clays of no great depth, reposing most part upon chalk, pure or mixed with gravel, and sometimes up and tertiary limestones. It comprises the *Paris basin*, an immense elevation of which ranges from three hundred to a thousand feet. gion of the North is chiefly occupied by the *large properties* an chosen seat of the *great culture*. Shade trees, and fences or inclo rare. Horses are exclusively used in rustic labors. Large farm rents are numerous. Long lines of apple-trees for the productio form one of the most striking features of this region, particularly a proach towards the ocean on the northwest. Root crops and he oleaginous plants are largely cultivated. The extensive pasture region support, for export, horses of extraordinary size, strength an large flocks of merino sheep, and fine milch cows, but the oxen are not considered of a superior race. The northern limit for th tion of the vine upon a large scale, passes through this region.

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* Farmers who pay no fixed rent, but half the annual product to th tor. *Metayer* from the barbarous latin *medietarius*, *medietas* (half.)

marked by a line commencing on the Rhine a little south of Stras-
about latitude 48° 25' N. passing southerly to Metz in lat. 49° 10'
ch is the most northern point, thence in the southwesterly direction
Paris in 48° 50' N. lat. passing near Chartres, between Alencon
ns, to strike the coast a little west of Nantes, in lat. 47° 20' north.
ent its position in France sufficiently indicated by its name, lies
on of the northeast. It is characterized by a great variety of sur-
ing composed in about equal proportions of hill and dale ; and a
onding variety of soil. It includes the ancient provinces of Loraine,
gne, and Champagne. The arid chalk plains which abound in Cham-
are abandoned to scanty pasturage and resinous trees. Its famous
ds are on the right bank of the Marne between Chalons and
. The productions of the forest exceed the bread stuffs in value.
and cattle are of a very inferior quality. Three-fourths of the farm
performed by horses and the other fourth by oxen and cows. Lands
ch are never allowed to lie fallow. This region is further distin-
by the infinite division of landed property, and by the prevalence of
ldling and *small* systems of culture. The most valuable productions
Burgundy and Champagne wines ; potatoes, forming a large part of
ment of man and beast and the oleaginous plants. Indian corn
tself in the southern portion of this region as an important article
vation. Farther north it takes a very low place among agricultural
ions. Barrenness is the general characteristic of the soil of this

region of the Southeast presents a still greater diversity of surface,
, soil and culture. Vast bodies of inferior land form its distinguish-
ture. Agriculture is in a very low and languishing state. It is con-
chiefly by *metayers*, and except in a few of the more northern dis-
altogether upon the systems of the small and middling culture.
are few and of very inferior quality. The labors of the farm are
ed by oxen. It is the general practice in this region to allow the
lie fallow every second or third year. Usually during this year the
s quite idle, but in certain localities it is planted in clover. There
ral tendency here to extend the cultivation of the vine wherever a
exposure can be obtained, upon a locality at a sufficient elevation
the level of the sea. On dividing this region into two parts by the
l of Lyons, 45° 46' N. lat. it is observed that the northern portion
les in its agricultural features the regions already described, while
thern half is marked by the first appearance of the mulberry.

on of the South.—In the immense amphitheatre formed by the region
south called also the *olive region*, attention is attracted to an agricul-
pectacle of an entirely novel character. Under the warm southern
er the surface of the well shaded soil, in the generally dry climate
south of France, shrubs and perennial plants are seen to take the
f those of annual growth or mingling together with them in the
ields. Their valuable products, partaking more of the character of
of commerce than of subsistence for the population, which can only
lized by the aid of funds advanced for larger or shorter periods, at-
umerous small capitals from the cities ; and ease and plenty prevail.
l meadows have disappeared and artificial meadows, which are sub-
to the general system of rotation of crops have taken their place.
egion does not produce sufficient wheat for its own consumption.
are employed for the plow, sometimes horses. Cattle are few and
n stock, but asses and sheep are numerous and of an excellent kind.
heep particularly under the influence of the climate and of an aliment
substantial than abundant, and well salted, are of robust constitution
rnish a very superior quality of meat for the table. They furnish be-

side the wool, the only milk, cheese and manure which are used in the country. Those in daily use upon the farms as well as the moving flocks, are employed for this purpose. Animals are rarely housed, and the enclosing them in folds is the only mode of manuring the ground. In the ancient province of Languedoc of this region, chestnut trees are very extensively cultivated. The mulberry and the vine are very important productions. It is here that the cultivation of the former attains its maximum of extent and its optimum of quality. The wines of this region are very strong and highly colored, destined for the most part for the distillery and exportation. The art of irrigation is well understood and generally applied here. Oranges, dates, in some favorable locations, lemons, olives, prunes and all dried fruits of all descriptions are furnished to commerce in large quantities from this genial region.

Region of the Center.—Agriculture is of a very slovenly description here, effected chiefly by *metayers*, under the "middling" and "small" cultures. The rural population is sober, frugal, and industrious, yet its agricultural contribution to the commerce of the kingdom, occupies the lowest rank. Every autumn a considerable portion of it emigrates to distant provinces, seeking employment during the winter, and returning home in the spring with their meager earnings. The chief productions of the region of the center are cattle and mules, which are raised for sale, the pasture on the mountains being of excellent quality and abundant.

Region of the Southwest.—A great variety of soil and production is offered in this division of France. The mulberry has almost disappeared. In the ancient province of Guienna, the cultivation of the vine is carried to the highest perfection. The most valuable wines of France are produced here. Bordeaux is the great mart. Its brandies of Armaguac are second only to those of Cognac. A large portion of the territory is devoted to the production of grain, among which wheat holds the first place, and Indian corn the second. Potatoes are produced in large quantities, and agriculture is skilfully conducted. The three species of culture obtain here. Rotation of crops is practiced, and with the best results. The plain of the Garonne is not so fertile as that of Flanders and some others, but the climate is better, and upon equal soil the crop heavier. Vineyards are cultivated for the profit of the proprietor by an overseer interested in the crop.

The Central Western Region.—Between the valleys of the Garonne and the lower Loire, bounded on the west by the ocean, extends a region whose inhabitants, thanks to its remote position, the insalubrity of its coast, the fertility of its soil, to its mild and equable climate, and its even surface, enjoy more largely than those of any other portion of France the quiet happiness of rural life. There, agricultural operations are conducted upon a scale equally removed from either of the noxious extremes observed in other regions, and long habits of friendly intercourse between the landlords and tenants have established amicable relations and terms of intimacy, which contribute to the happiness of both. The low price of provisions and the abundant production of the finest fruits, make living easy and comfortable. Beautiful meadows border the rivers and skirt the sea. Cattle of the finest form feed on the plentiful pastures of clover and sainfoin. They are raised with care and intelligence, and are a valuable article of export, being highly prized, both by the butcher and the farmer of other provinces, who would employ them in agricultural labors. This favored and happy portion of France is the *central western region*.

The last of the eight divisions remaining to be described, is the *landes*, or heaths. They occupy a broad belt of territory commencing near the center of France at about 46° north lat. and 2° of long. east of Paris, and stretching northwesterly to the ocean; comprising within their limits the cities of Moulins, Nevers, Bourges, Chateauroux, Blois, Rennes, An-

'antes, Vannes, and Quimper. The absence of lime or the
: of flinty clay in the soil, renders this region comparatively
:oduces abundantly thorn, broom, and juniper. The inferior
sed in only moderate quantities, and impoverished cattle seek
e where meadows, neither natural or artificial, are met with.
systems of culture pervade certain parts of the *landes;* but
is of its soil, the bad state of its roads, and difficulty of com-
vith the capital, have placed this region, in an agricultural
', far in the rear. Sheep and cattle are raised in certain parts
market.

of land in France varies, of course, with locality and quality.
sture land in Normandy brings 5,000 francs the hectare, (equal
acre, about.) In the *Sologne*, a portion of the modern depart-
Loire et Oper, land sells at $4 per acre. Farms in the
partment of Puy de Dome,) one of the most fertile portions
om, fetch $2 90 per acre. Eligible garden spots in the cen-
of France sell for $320 per acre; and farms located in the
ths, command an average price of $12 per acre.

ial work on the statistics of the kingdom, published by the
Commerce, the extent of the various soils of France is thus

ous regions,	4,268,750	hectares.*
	5,679,089	"
ld,	7,276,369	"
lime,	9,788,197	"
	3,417,893	"
	6.612,348	"
	5,921,378	"
	2,232,885	"
r marshy,	284,454	"
ts,	7,290,238	"
	52,768,600	"

the fertility of the soil of France by its production of bread
scertained that that portion of it which is of the first quality,
ut 8-25 of the territorial surface of the kingdom, and is found
s of the ocean, in the valleys of the rivers flowing from the
d in the great plateau which stretches toward the north, be-
Loire and the sea; that land of ordinary fertility makes up
whole, and is comprised, for the most part, in the provinces
and finally, that the positively barren tracts, counting in the
mate for the whole rest, or 41-200 of the soil, belong to the
ons, from the Lozere to cape Finisterre. Five-sixths of the
said to be productive, and one-sixth unproductive and incapa-
oration, consisting of mountainous districts of downs, or being
of chalk or flinty clay formation.

wing table presents at one view the most important of the agri-
luctions of France, the extent of land employed in the cultiva-
severally, the annual amount produced, the average price, and
The results contained in this table are not all equally exact
The authors of the statistical work from which it is taken,
nay be with confidence relied upon in respect to the most im-
cles, to wit: the grains or bread stuffs; but that the amounts
as the annual product of wines, brandies, ciders, are doubtless

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nch *hectare* is equal to 2.471143 of our acres—or to 2 1-2 acres
s—or to 2 47-100 acres, very nearly.

far below the actual amount produced. Waste during the winter, local consumption, and, above all, fraud, prevent compilers of statistics from arriving at any thing more satisfactory than approximations upon this subject. The cultivation of potatoes is so infinitely divided, as are garden vegetables generally, that nothing absolutely certain can be gathered respecting them. The number of mulberry and apple trees is also doubtful, because of the various modes of culture adopted, more frequently in long lines on borders and along waters, than in well defined orchards.

Productions.	Hectares cultivated.	Hectolitres[*] produced.	Av'ge price pr. hectolitre[†]	Total value.[‡]
Wheat, - -	5,591,520	69,694,189	15 fr. 95 c.	$211,000,000
Rye, - - -	2,577,254	27,811,700	5 " 95 "	59,258,548
Maslin, or meslin, -	910,833	11,829,448	12 " 20 "	28,834,070
Barley, - -	1,188,189	16,661,462	8 " 25 "	27,594,492
Oats, - - -	3,000,634	48,899,785	6 " 20 "	60,402,994.
In. corn(maize)& millet,	631,732	7,620,264	9 " 40 "	14,359,417
Buckwheat, - -	651,242	8,469,788	7 " 25 "	12,277,728
Beans and lentils, -	12,391	241,151	8 " 35 "	437,788
Gard. vege's,pears,pulse,	700,000			43,100,000
Potatoes, - -	921,971	96,233,985	2 " 10 "	40,421,173
Beets, - - -	57,663	15,740,691	1 " 85 "	5,795,890
Cabbage, colza, -	173,506	2,276,363	22 " 45 "	10,225,349
Hemp (Killogrammes[‖])	176,148	69,178,717		17,257,468
Flax (in Killogrammes)	98,241	36,875,401		11,501,443
Madder (in quintals,[§])	14,676	160,340	58 " 25 "	1,868,670
Tobacco, - .	7,955	88,697	61 " 79 "	1,097,000
Artificial meadows,	1,576,547			40,753,034
Natural meadows, -	4,108,198			92,519,645
Fallow—land, -	6,763,281			18,457,180
Pasturages and heaths,	9,191,076			16,412,809
Orchards,nur'es, osieries,	766,578			
Olives, - -	121,229	167,330	136 " 10 "	4,555,280
Vines, - - -	1,972,340			96,000,000
Chestnuts, - -	455,387	3,478,582	3 " 90 "	2,705,638
Cider trees, - -		10,880,947		16,884,427
Forests, - -	8,804,551			41,320,105
Walnuts(Killogrammes)	6,744	1,503,591	1 " 17 "	348,108

Another summary gives the following results:

	No. of Hectares.	Annual value of production.
Area under cultivation. - - - - -	19,945,891	$711,602,826
" in orchards, nurseries, and osieries, - -	766,577	
" in meadows, pastures, landes, and fallow,	21,097,953	152,496,487
" farms, - - - - - - -	8,804,551	41,320,105
	50,614,972	905,419,418

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[*] The French *Hectolitre* is equal to 22.00967 gallons English, or very little more than 2 5-6 of our bushels.

[†] In this conversion of French into American money, 5 francs is deemed $1.

[‡] 1 franc equal to 19 1-4 cents. 100 centimes (c.) equal to 1 franc.

[‖] 1 killogramme equal to 2.2045 lbs. avordupois, or nearly 2 1-5 lbs.

[§] The French quintal is equal to 1.97 cwt.

THE PUBLISHING BUSINESS.

Chambers' Miscellany of Useful and Entertaining Knowledge. Edited by WILLIAM CHAMBERS. Boston: Published by GOULD, KENDALL & LINCOLN, 1848.

Information was never put in a more pleasing and attractive form than in the volumes of the Miscellany. There are many reprints of choice and short works, some of those that we have read in our youth, and then lost sight, but not memory, of. Such, for example, is the romantic adventures of Admiral (then Midshisman) Byron on the coast of Chili and Patagonia, after the loss of the Wager store ship. If any one has not read this narrative, we can safely recommend them to buy the number, and the reading of this single story will amply repay them. In the same number a rapid sketch is presented of that portion of Scotish history which is truly her heroic age, including the struggle of Wallace and Bruce against the English power, wielded by the first Edward; a period that inspired the peasant bard of Scotland with the noblest warlike lyric ever written. Other numbers are equally attractive; in one we get a reperusal of that strange poem of Coleridge, the "Ancient Mariner," with other of the musical and fanciful productions of the great metaphysical poet of the age. In the same number is an account of the war in Hayti, aud the establishment therein of the anarchical polity of the negroes; but the most interesting, perhaps, to young people, is the paper entitled, Curiosities of Vegetation, a summary of the chief wonders of the vegetable world, and highly instructive for its admirable arrangement and clear exposition of the great laws which govern the being and growth of plants, and startling to those who have not travelled to the land of the palm and the banyan. This, and the wonders of geology, are worthy the brilliant genius of the author of the Vestiges of Creation. To the young we would especially recommend hese attractive works, in which utility and pleasure, wisdom and delight, are so rarely mingled.

Report of the Superintendent of Public Education in the State of Louisiana, 1848.

We expected this paper with great interest, arguing from the established reputation of Prof. Dimitry. It by no means satisfies this expectation. Too much haste is evident from the pages, and too little research. The paper affords but very few facts, and scarcely any thing determinate. In a subject so full of interest, something better surely could have been afforded. The style, at least, was susceptible of improvement. As the "head of the educational movement in Louisiana," the Superintendent would do well to take our suggestions in the good part they are offered.

The Renegade; a Historical Romance of Border Life, by EMERSON BENNETT, author of the "Bandits of the Osage." Cincinnati: ROBINSON & JONES. 1848.

We have been kindly furnished by the publishers with the proof sheets of the work before us, and commend it in all heartiness to the attention of the reading public. It will be found to be strictly what its name imports, a historical romance of early times in the west. At a period in the history of Kentucky, 1781, when hostility marked the meeting of the red man with the white, the scene opens. The history of Daniel Boone, and of many of those exploits through which his name has been handed down to us as identified with the population of that great and growing State, is sketched with a master hand, and colored with the tints of a delightful fancy.

It is encouraging to note the rapid improvement in the arts, and the high standard to which the west seems determined to elevate her literary character, no less than her commercial greatness and integrity. For Mr. Bennett, who is still a young man, and ambitious of the distinction to which, we doubt not, his intellectual qualities justly entitle him, we may confidently predict a high rank among the literary writers of our country.

The West, its Surface, Soil, and Productions, by JAMES HALL. Cincinnati: DERBY, BRADLEY & Co., Publishers, 1848.

Judge Hall has, in the volume before us, republished his "Notes on the Western States," written some years ago. These Notes have had great popularity, and embody an amount of information in relation to western life, &c., scarcely to be had in any other quarter. They have been revised, added to, and brought down to date, receiving therefrom a value which would not otherwise have attached to them in this progressive age. The connexion of the author with the Chicago Convention, of which he was a prominent member, doubtless induced him to the task.

The Western Lancet; a Monthly Journal, devoted to Medical Science. Cincinnati: ROBINSON & JONES.

The April No. of this excellent work is now upon our table, and fully sustains itself in the reputation it has acquired. Art. 1, by John P. Harrison, M. D., a "Clinical Lecture on Typhoid stage of Bilious Remittent Fever," will commend itself to the attentive perusal of the scientific. The 2d art. is a "Report of a case of Abscess in the Pregnant Uterus, occurring in the Commercial Hospital," by John A. Murphey, M. D. A valuable paper upon a "case of Eclampsia Parturientium, or Puerperal Convulsions," is furnished by Thompson McGown, M. D., of Hillsborough, Miss. There are besides much highly interesting matter upon the subjects to which the work is devoted, and we commend it to medical men generally.

The Secrets of Mount Echo, or Mother's Mysteries; an American Romance, by JESSE CONARD, author of "Stephen Morland." Cincinnati: ROBINSON & JONES. 1848.

This novel is the continuation of a series of original works by native authors, which the publishers propose to offer to the patronage of the reading public, more especially in the west and southwest, and of which the successful novels of "The Victim of Intrigue," and "The Bandits of the Osage," were the pioneers. Past experience justifies us in believing that there is an abundance of literary taste in this section of the Union to sustain the publication of western efforts possessing undoubted merit. The Secrets of Mount Echo will be found to possess much literary merit. It combines a pleasant style with strong dramatic interest. The locality of the romance is one crowded with colonial and revolutionary tradition. The homestead of the renowned Gen. Anthony Wayne, the battle ground of Brandywine, the scene of the massacre of Paoli, are all points of interest to the American reader, and will not fail to invest the story with additional attraction. The novel is issued in cheap form, making 123 pages, large octavo, printed on good paper and clear type.

Moena, and other Poems, by THOMAS S. DONOHO. Washington City. We are much pleased to see the poetry of our early friend in such an elegant style. The greatest eulogy we can bestow upon the native offsprings of the poet, is to say that the gems are worthy of the casket containing them. When anonymously published, we know of no more frequently copied verses than those in this volume; and we doubt not that the collection will be at least as well received by a discerning public. Embraced in it are the combined attributes of a high practical talent, a sound judgment, and a good heart.

THE
COMMERCIAL REVIEW.

Volume V. **MAY and JUNE, 1848.** **Nos. 5 and 6.**

ART. I.—NOTES ON MEXICO, IN 1825.

NOTES OF A TOUR FROM THE CITY OF MEXICO TO TEZCUCO, OTUMBA AND ZEMPOALLA, WITH SOME ACCOUNT OF THE CULTURE OF THE MAGUEY OR AGUÆ AMERICANO, AND OF THE MANNER OF MANUFACTURING PULQUE' TOGETHER WITH A DESCRIPTION OF THE PYRAMIDS OF TEOTIHUAÇAN.

[The following article has been placed at our disposal by the Hon. Joel R. Poinsett. It has not been included in his "Notes on Mexico," or in any other publication. As our knowledge of that country must be derived from those having the best opportunities to impart it, whether of former or more recent periods, we feel assured that the readers of the Review will value a fragment so interesting. While United States' Minister, Mr. Poinsett had facilities for examination, which a time of peace and good will between the two countries was best calculated to afford.—Editor.]

December 25th, 1825—Left Mexico at half-past nine o'clock; fine view of the volcanoes; mountains rising gradually from each side of the road; passed the gap and turned to the left over the bed of the lake, following the road which runs upon its edge; change of scenery; cultivated fields; passed several haciendas on the right of the road—Sta Martha and Santa Magdalene the largest; passed the village of Chiqulaopa seven leagues from Mexico and near Quantlalpa; about a mile further, stopped and inquired the names of these villages from an intelligent old Indian; supposed of course that we were going to the cock-fight at Tezcuco; lamented the death of the finest cock ever reared, carried off by a "Coyote;" would not have taken twenty "duros" for it; begged us to wait until he brought out a special fine one that he was training; put it on the ground that we might see its height; and we left him with his foot upon the jesses, admiring the beauty of his bird.

The beauty and cultivation of the valley increased as we came nearer to Tezcuco; shortly before entering the gate, passed the hacienda of Chapingo, belonging to the Marquis of Vivanco; the bridge of Bergantines, a few yards from the gate, where Cortes is supposed to have launched his vessels; lake filled up, the nearest point now four or five miles from Tezcuco, but the whole of that space bearing evident marks of having been covered with water; passed the square or market place, and turning to the right into the principal street, stopped at the house of Dr. Nicolas Campero, collector of Diermos for this district; hospitably received by the ladies, who informed us that the gentlemen were all at the "Gallos," (cock-fight.) Hither we posted, and on paying twenty-five cents at the door, were admitted to the scene of action. Officers and their wives—gentlemen and ladies—men and women—Dons rolled in cloaks of fine cloth, and leperos wrapped in their blankets, all regarding with breathless attention the issue of the combat, on which depended bets to great amount to all parties. We stopped near the door, not to interrupt the spectators, until one of the cocks was killed, when we moved on without difficulty to where our party was seated; the mob having rushed over into the pit.

As we passed the orchestra, the music struck up—two mandolines, two guitars, and three singers, which filled up the intervals between the fights. The birds were carried round by the trainers; Mexico against Tezcuco. Brokers bawled out the bets, and after a great deal of indescribable manœuvring by the trainers—putting the cocks down and snatching them up, and plucking feathers from their necks, and spirting spittle between their bills—the cocks were left to themselves, and there was a fair set-to, which excited the same interest as the last. When it was over, I was glad to find it was time to go to dinner.

In the afternoon, we walked to the house of the commandant, Dr. Mariano Villaurutia, where we saw several idols of basalt, similar to those so often described, and a large stone carved into the form of a rattle-snake, extremely well executed. From hence we bent our steps towards the great square, and on passing near the corner of a street, perceived a broken statue buried, with the head down: part of the back and thighs only being above ground. What could be seen, appeared to me to be better formed than most of the Indian statues I had yet seen.

We were next taken to the ruins of the palace of Montezuma, as they are called, a large mound, where there are still several very large square stones, laid as if they covered the surface of a vault. We measured the first two, which appeared as if laid over the mouth or entrance, and found them of large dimensions. We saw, too, a great many large fragments, and some entire stones, scattered over the mound,—one of a circular form, half discovered,—and were informed that many of the houses of Tezcuco had been partly built with stones taken from these ruins. The platform before the church of San Francisco is paved with them—some of immense size, and some sculptured; one circular stone, similar to those which are supposed to have been the altars of human sacrifice. We plainly perceived many of these stones built into the walls of the church; some of the largest serving for corner stones, and being perfectly square. Night overtook us groping about for antiquities, and we returned to the house reluctantly. At eight, we went to the cock-pit again, where were assembled all the beauty and fashion of Tezcuco. We saw one or two dances, and a great display of affectation and awkward graces in the figures; the women very ill dressed and rather ill looking, smoking

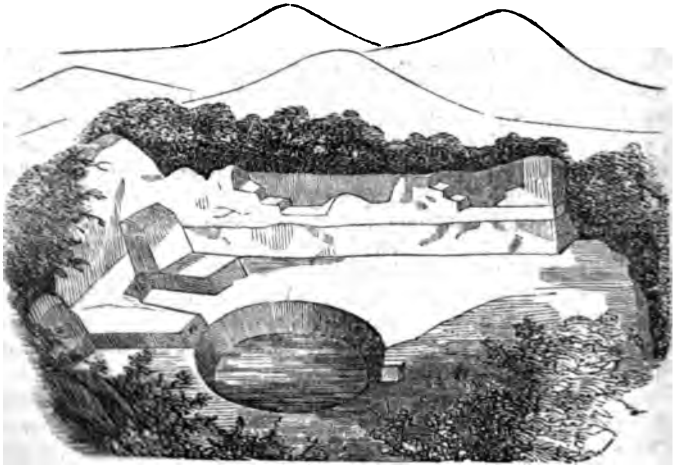
: betters, and with the smoke curling gracefully out of their
nd noses, looking round for admiration. We soon left the
returned to Campero's, where we passed a pleasant evening.
iis daughters played very well upon the piano, and they are
·, good-natured, amiable girls. The mother of this large fam-
l very fresh, and quite pretty.

ɜxt day, (December 26,) we went immediately after breakfast
ins of the palace, and viewed near them an arched passage
ater, said to be the work of the Indians. It is regularly
nd well built of square stones the size of bricks, cemented
mortar so much used by the Indians in all their works. Some
ith this cement, are among the specimens. On expressing
ɜspecting the knowledge possessed by the Indians of the arch,
ken to see a very perfect one found among the ruins of the
It was the door of a room which contained a stone urn.
iately, the urn has been carried off. The good woman who
ɜ piece of ground, had four of the stones, which formed the
culars of the old door, worked into a new door in her court-
'o have placed the arch, would, she said, have left the door
The three stones were lying against the wall. We had
iced as they were originally found, and they formed a very
.. Of these stones, one was 5 feet 8 inches in length; the
eet 3½ inches; their thickness is 1 foot 10 inches.

.r return to the house, we found the carriage ready to convey
mountain of Tezcucingo. We passed over a well cultivated
Not settled as in our country and in England, with cottages
ı houses scattered over the country; but more like France—
.ciendas and villages, with their churches and white-washed
ising from among the trees. After about an hour's ride, we
ɜd abruptly to the borders of a small stream, and crossing it,
the gates of a large mill, built like most edifices in this coun-
. great solidity. We got out of the carriage to examine the
d dam and works of the mill. The latter are, in the extreme,
ınd simple. These people have as yet no idea of the modern
nents in mill machinery. Two tub wheels turn upright shafts,
ı the stones are fixed, and most of the finer operations of bolt-
, are performed by the baker, after the flour is carried to mar-
'e walked along the border of the canal, which is well con-
of stone and mortar, to the dam. Here the water is precipi-
ɜr a height of about twenty feet, and falls into a natural basin,
ence it is conveyed to the mill. The surplus water, which, in
ıy season, is considerable, falls over precipitous and broken
to the bed of the river, a height of about twenty-five feet.

e seen nothing in this country more beautiful than the walk
.e bank of this canal. It is overhung on the left by steep
ith small shrubs and some large trees growing in the inter-
while on the right, the eye may either dwell upon the stream
ing amidst rocks and shrubs, or range over a plain terminated
iills that enclose the valley of Mexico on this side, and which
ı overtopped by the snowy mountains.

the extremity of the canal, the owner has had a platform built and surrounded with seats. It is overhung with trees, and the view is enchanting. We left this spot with reluctance, and proceeded on foot, under the guidance of an Indian cicerone, Domingo Zimenes, to cross the stream, by stepping from rock to rock. We soon gained the plain, which leads by a gentle ascent to the foot of the mountain of Tezeucingo. This plain is covered with long grass, which, at this season of drought, is dry and parched. Occasionally we find spots entirely bare, with fragments of pottery, splinters of obsidian and small stones of porphyry. On our left were the villages of Purification and San Nicolos, and on our right the two San Diegos—the smaller distinguished by the Spanish diminutive San Diegilo. We reached the foot of Tezeucingo after an hour's walk. Our guide led the way up the western side of the hill, when, he said, we should see some doors of stone. After a fatiguing and steep ascent, about half way up to the summit, we reached the door we had been told of. It proved to be the mouth of a subterranean passage hewn in the rock. We descended about twelve or fifteen steps into the rock, until they turn suddenly to the left, so as to exclude all light. Having no candles or torches, we were obliged to abandon the attempt to go any further, and returned to the entrance. The rock through which this passage is cut, consists of crystals of horneblende and feldspar, which although small, give it a beautiful appearance. On ascending a short distance higher, we came to a sort of terrace, about four feet wide which led us to the bath of Montezuma. A projecting rock of extremely hard porphyry, has been cut out into a circular basin. The



BATH OF TEZCUSINGO.

[illegible] channel to conduct the water from the basin, and it enters ov [illegible] waters. A very commodious seat is chiseled out of the rock, a [illegible] is a sort of platform, with a wall or parapet on each side, all c [illegible] the same rock. Two steps descend into the basin. The vi [illegible] is very extensive, commanding the valley and lake

Tezcuco and the city of Mexico. This curious work is as perfectly wrought as any thing of the sort can be, and leaves us to wonder at the skill and ingenuity of the Indians, who hollowed out so perfect a circular basin of the hardest rock, with tools of obsidian and composition metal.

We pursued our walk along the terrace, on which are to be seen the ruins of the conduit which conveyed the water to the bath; and not far from it, there is an artificial embankment, along which the aqueduct was continued across a small valley, and which connects Tezcucingo with the opposite mountain, where there is a fountain of water. We followed our guide up to the summit, when he said there was another door. It proved to be a mass of porphyry, apparently cut down by the hand of man. Here, as in many other places on the hill, we found plaster made of lime and pounded "Tetzontli," amygdaloid; the surface finely polished, and some of it appearing to have been painted. Of this we brought off some specimens. As we descended on the other side of the hill, we came unexpectedly upon the ruins of another edifice. Among other vestiges, were seven steps cut in a rock of red porphyry, still as perfect as the day they were finished. We continued to wind down the hill by a precipitous descent, clinging to the bushes in order to prevent ourselves from slipping over the loose stones, until we reached the plain. We returned to the mill of Flores, where we had left our coach, not a little fatigued, for we were loaded with specimens of plaster and stones.

At half-past four we were seated at the hospitable table of Campero, where we were well received by all save a fat priest, who looked somewhat sad at having been kept so long beyond his usual dinner hour. He heard our narrative with a sneer, and looked upon our specimens with utter contempt.

After dinner, we took a walk with our host to see a house where, as he told us, there was an extensive crust of ancient mortar. We found in front of the house the crust he had described about four inches thick, extending a great distance, probably the ground floor of one of those vast palaces described by Cortes. In one place an excavation had been made under it for a hog-stye and hen-house. Such is the strength and consistency of this ancient mortar or concrete, that large square blocks had been cut from it and laid for flags in the courtyard of the house opposite. These looked so like stone, that one of my companions broke off a piece in order to ascertain the truth of the old lady's story. It proved both the truth of the good dame and the irritability of her temper; and we were fain to walk off, leaving her scolding at a round rate at our presumption.

December 27th.—Early in the morning we walked again over the ruins of the supposed palace, and again admired the excellence of the workmanship, and the immense size of the stones, which must have been brought for some distance, as the nearest quarry is more than a mile from Tezcuco.

After breakfast we walked to the artificial mound at the entrance of the gate of Tezcuco. It appears to be the remains of one of the many large pyramids that are scattered over the country, and which were, most probably, temples and sepulchres. This had been cut through by the Spaniards in several places, in making the ditch which formed the defences of the town against the attacks of the Mexicans during the late revolutionary war. We were enabled, from this circumstance, to see the different strata of mortar and "adobes," or unburnt bricks. There is a layer of mortar about three inches thick for every four feet of adobes, intermixed with stone, and in parts are seen vertical insertions of plaster. In this manner the whole mound is formed, from its foundation to its summit. It is of great extent, and from the basis of the mountain on the opposite side, the foundation appears to extend very far beyond the ditch and the external appearance of the mound.

On our return, we found the carriage in readiness to convey us to the Ahuahuetes, a square of very large cypress trees, (*Cupressus Disticha.*) where, it is supposed, there was formerly a country palace. We found, about a league from the city, a square of about eight acres, surrounded by some of the largest cypress trees I ever saw. In front is an open space, raised much above the level of the surrounding country, of the size of the square, from each side of which the trees extend out some distance, so as to flank this space, on which, it is supposed, the house was situated. Behind the square is a narrow avenue of the same trees, with their upper limbs interlocked.

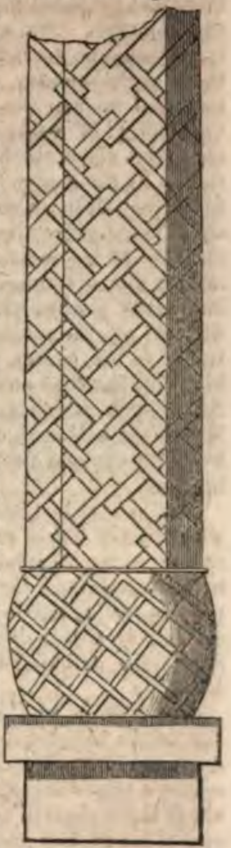
In the evening we were at a grand ball given by one of the principal merchants of the place, from which I was soon smoked out.

December 28th.—We set out after an early breakfast, and passed over rather a barren tract of country to the hacienda of San Antonio. This is a very fine estate, once the property of the Jesuits—and is another evidence of the judgment, industry, and wealth of that order. All the lands are so situated as to be irrigated, and the water is retained by a dam of some miles in extent, built of stone and mortar, and of great strength and solidity.

From San Antonio, we passed several smaller haciendas to San Juan de Teotihuacan. Some time before we reached this town, we came in sight of the Teorallis or pyramid of Teotihuacan. Viewed from this distance, they appeared in much more perfect preservation than that of Cholula, although not so large. We kept them in view until we arrived at Otumba, a small town, which like San Juan is in ruins from the effects of the revolution—they having been both often taken and retaken in the civil wars of that period. We were provided with a letter for a respectable inhabitant of this place, but unfortunately, he had gone to see the cock fight at Tezcuco. We drove therefore to the 'Meson' of Otumba. I need add nothing to my former description of Mesons. This is one of the worst. As it was yet light we sallied forth to view the columns talked of by former travellers. No one could give us any account of where they were to be found. The alcalde was absent, and after inquiring in vain for some time, we went at length to the house of the vicario, who told us that the only column he had ever heard of, was one that had stood formerly in the square—but which was thrown down, broken up and used for building in 1821—that there was still a fragment left in the square, which we might see. We set out under the guidance of the old vicario, who on the way entertained me with an account of the pyramid of Cholula, it was, he said, a tower of immense height, which the foolish Indian idolaters built to reach to heaven, and which God in his wrath destroyed —fragments of it being scattered to the distance of several leagues— another tower of Babel. In the middle of the square, we found the broken column, not adorned with hieroglyphics as we had been informed, but ornamented by diamond figures interlaced. It is of red sand-stone and well cut. While we were taking the dimensions and making a sketch of it, we were surrounded by the men of the town, who flocked out of their houses and shops to see what we were about. They were extremely civil and communicative, and offered to show us other curious stones. We accompanied them to several houses, but what they deemed works of antiquity, all proved to be of more recent date.

We returned to our Meson, so I must call it—for a meson is not an inn nor a caravansery, nor any thing but a meson. After having made an arrangement with a young man to procure horses for us to go the next day to Zempoalla, we had our camp beds put up, and made preparations for passing the night. While thus employed, we received the visit of one of the companions of our rambles about the town, who brought with him the administrador of a neighboring hacienda. With a kindness and hospitality, characteristic of the people of this country, they came to offer to accompany us to Zempualla on the next day, and the administrador assured us, that he would send us horses early in the morning from the hacienda. His friend engaged to satisfy the young man, who was to have accompanied us, and we accepted their kind offers.

December 29th.—Punctual to the time, at seven o'clock, the horses were in the court yard, and our two friends mounted and ready to accompany us. We proceeded for about a league and an half through maguey fields to the hacienda of Soapayuca, belonging to the Conde de Tesse, an old Spaniard, now residing in Madrid. The house is large and commodious—the granaries very extensive, and the chapel rich and in good taste. It is very creditable to the different governments that have ruled this country since the revolution, that none have ever proposed even the confiscation of the property of the old Spaniard.



COLUMN IN OTUMBA.
Height of the column 8 feet 2 inches.
Diameter 1 foot 9½ inches.
Length of a mutilated portion 7 feet 2½ inches.

From Soapayuca, we rode through more and more maguey fields to the hacienda of Ometusco—belonging to Don Ignacio de Adaled, a wealthy Mexican. The buildings of this hacienda had likewise been destroyed in the wars of the revolution, and nothing but the dwelling house has been rebuilt in a style almost of magnificence. The principal drawing-room is furnished with two chimnies, a luxury much wanted in these high regions. Here we found an excellent and substantial breakfast prepared for us, to which after a ride of four leagues, we did ample justice. We walked about the hacienda and examined all the improvements made and to be made in the building. It is like all those in the country, on a very extensive scale. This is a pulque estate, and we saw the whole process of making the liquor from the "caponing" of a maguey to the drinking of the fermented juice. We first went about the field looking for one fit to be cut, which is ascertained by the center leaves. These are always firmly united in a cone until they drop: a short time before the plant shoots out its flower stalk, these center leaves become comparatively thin, and the thorns on those of the interior are black. In this state, we found a maguey and it was determined to capon it although a plant will yield more and better pulque, when cut in the spring or summer. The operator first cut off the internal edge of the large leaves, so as to make an entrance to the center, free from thorns. He then stripped down the leaves of the cone and broke them off until nothing remained but the flower stalk, which was removed with a wooden paddle. He next enlarged the hole with an iron instrument, the size of a small crow-bar, but with one end flattened and sharpened so as to cut—a pendecular hatchet.

The hole at last had the appearance of a small tube. This he filled with the dry leaves of an old maguey, and we were told that it must remain so for at least four months, when the leaves are removed, the hole cleansed and the juice taken out twice a day. After seeing this process, we proceeded to a plant in full yield. The hole we found stopped up with a large stone to prevent the cattle, wild animals or dogs from drinking the honey water, as the juice is called, before it ferments.

The laborer, who collects the juice, carries a skin on his back with the mouth hanging over his shoulder—a large calabash having a horn fixed to the small end and a hole in the large—this serves as a syphon—and a small iron scraper. When the stone was removed, we found about three pints in the cavity which the Peon, putting down the horn end of his syphon and applying his mouth to the hole in the large end of it, soon sucked up and poured into the skin at his back. He then carefully and gently scraped off the surface of the cavity, so as to open the pores anew and replaced the stone. This operation is repeated regularly twice a day. When the skin is full, it is laid down and another taken—and at a given hour the asses are brought into the field and loaded with the well-filled skins. They are unloaded in a large room and the honey water is measured and poured into vats formed of hides, stretched over four sticks. If the fresh juice is put into a separate vat, it requires to remain six or eight days to ferment before it is fit for use—but the custom is to pour it on lees and to mix it with old pulque—and in that manner it is fit to drink or to be transported to market the next day. This hacienda yields a net revenue of $15,000 a year, from the sale of pulque alone.

After being made thoroughly to understand the art and mystery of making pulque, we mounted our horses and proceeded to Zempualla. After riding about two leagues we came in sight of the arches of which we had heard so much. They were built to convey water across a deep valley in order to supply Otumba and the intervening country, which is without a single stream. Both the large haciendas we saw being supplied with water by means of a large cistern and reservoirs. This is a work as stupendous as it is useless. The valley is crossed by sixty-seven arches. The center arch, which from its great height is made double, is 122½ feet high. The others diminish in height on each side as they recede from the center, the last arch being not more than 10 feet high. The scaffolding used for constructing the arches was composed of adobes' for several of them still remain filling up the interior of the arches. The whole of the aqueduct is built with such solidity, that not a stone has given way in any part of it. This work is by some attributed to the Jesuits and by others to a community of friars of the order of San Francisco. The aqueduct where it is continued on a level with the soil, is completed quite to Otumba and a small sum would put the whole in order. All that was really required where this extensive work stands, was an aqueduct of a single arch to cross the stream that flows in a ravine along the valley, for the height of the hill where the source rises is much greater than the level along which it was intended to convey the water. After passing some time in admiring and examining these arches, we again mounted our horses, and threaded our way among the maguey plants back to Otumba, where we arrived a little after night fall.

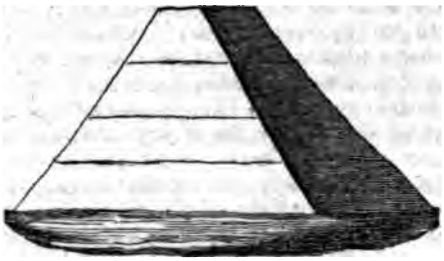
December 30.—The next day we were on horseback early, on our way to the pyramids Teotihuacan. We rode through fields of good land but very badly cultivated in corn and barley, to the village of San Miguel. Here we left our horses, and ascended the smaller of the two great pyramids. It is constructed like all we have seen of adobes stones, and here and there, layers of cement. On the summit we found the ruins of an old building, evidently, from the form and from the mortars, built since the conquest. From the top of this pyramid the view extends over the lake of Tezcuco, embracing Mexico and the heights that shut in the valley on every side. I was much struck with the order in which these pyramids were placed. Immediately in front of that on which we stood, there was a circular space surrounded by smaller tumuli of the same regular shape with one in the center—opposite was a large street having on each side tumuli of the same form and size. Extending far along and near the extremity but out of the line, stands the largest pyramid. This has a terrace, nearly half way between its base and summit about 5 feet wide. On one side of the circular place d'armes, we were shown a large stone ten feet and 3 inches long and five feet one inch wide, symmetrically cut out of the hardest basalt, with crystals of feldspar, resembling the stone of sacrifice. It appeared to me to be an idol with the carved side down. We had no means to turn this immense stone, and after taking its dimensions, examined tumuli on each side of the street. All that we saw bore traces of having been covered with some building—and on one were distinguished the size and form of some of the apartments.

The large pyramid offered nothing new—it is covered with fragments of pottery and wrought obsidian, and is a perfect and regular pyramid of vast size. Our time did not permit us to take the dimensions—but they are to be found in Humboldt. We found our carriage waiting for us in the square of San Juan, and taking leave of our kind conductors, we drove over the bed of the lake, which at this season is dry, and proceeded on our way to the capital where we arrived in the evening.

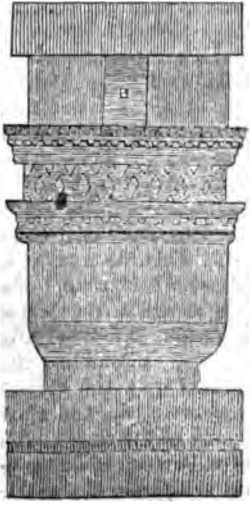
NOTE FURNISHED THE WRITER BY CONDE DE VIDUA.

Près de San Juan de Teotihuacan au N. E. de Lac de Tezcuco, et dans les dependences de la Vallèe d'Otumba on voit deux Teocalli de forme piramidale etonnants par leur grandeur.

Le plus grand de presente comme dans la figure encontre, et à peu près avec les memes proportions.



Je na me rappele pas ses dimensions donnees par Hamboldt; mais j'ai jugé le coté de sa base d'environ 750 pieds anglais.



Il s'appelloit en langue Azteque Tonatiuh Ytzaqual, ou maison de Soleil; l'autre plus petit, et à peu de distance de premier meztle Ytzaqual, (maison de la lune.) Aux environs de ce dernier on remarque un grand bloc de porphire que à la premiere vue on juge informe; mais examine plus attentivement on y decouvre les traces d'une image du Soliel, c'est à dire un visage entourè par des rayons, le mème signe de convention par le aquel les anciens peuples du vieux monde le representaient. Une seconde masse du même porphire et que probablement suivait de suport à la premiere se rencontre à peu de distance de celle-ci. Elle est de la forme et des dimensions donnèes par la figure. La partie est un enforcemant d' à peu près un pouce. L'autre est tout à fait plâtè, quoique ses cotes soient faconès à doucine renverscè comme le marque la figure. L'epaissaue de celte pièrre est le même que sa largeur.

Art. II.—SILK AND THE SILK CULTURE.

ORIGIN OF THE SILK INDUSTRY; EARLY HISTORY; SKETCHES OF PROGRESS; PECULIAR VIEWS AND PRACTICES OF THE CHINESE IN THE PRESERVATION OF EGGS; CULTIVATION OF THE MULBERRY TREE; CONSTRUCTION OF FADING APARTMENTS; MANAGEMENT OF THE SILK WORM; COCOONERIES, ETC., ETC., ILLUSTRATED BY CUTS; INTRODUCTION OF SILK CULTURE IN OTHER COUNTRIES; HISTORY OF SILK IN THE UNITED STATES; NATURAL FACILITIES OF THE U. S. FOR MAKING SILK; ADVANTAGES OF SOUTHERN AND WESTERN STATES; COMMUNICATIONS FROM PRACTICAL MEN; GENERAL SUGGESTIONS ON THE SUBJECT.

[CONTINUED.]

The history of the silk culture in the United States—which is but the continuation of a series of efforts to establish it in England—commenced long before the discovery of this continent by Columbus. It is appropriate, therefore, to preface what we have to say under this head, by an allusion to the introduction of the silk trade into England, and their repeated attempts to make cocoons.

No sooner had the elegance of silk, as an article of apparel, began to attract attention, than the whole energy of the government was bent upon the introduction of its manufacture as a new industry for their own people; and if any one feature of British legislation has been more prominent than others, it has been the incomparable perseverance with which they have fostered and perfected their own manufactures.

Their example in this respect is worthy the imitation of all other governments, and *above* all of our own. To this spirit, more than all other causes combined, are they indebted for the present extent and perfection of their manufactures. In nothing has this been more marked than in reference to *silk*. As early as 1180, during the reign of Henry II., the beauty of silk began to be admired and coveted.

We are informed that, at the marriage celebration of Margaret, daughter of Henry III., with Alexander III., of Scotland, no less than 1,000 English knights were apparelled in cointises of precious silk.

The first example of the restrictive policy of Great Britain, was an act, in 1363, to encourage the manufacture of silk. This act restricted manufacturers, merchants, &c., to the making and dealing in one particular kind of goods, with an exception in favor of females engaged in the manufacture of silk.

In 1454, an act was passed, prohibiting for five years the importation of every article of silk which they were capable of making themselves. In 1463, this statute was extended to several other articles, such as laces, ribbons, fringes, silk twined, silk embroidered, tires, purses, &c. In 1482, the encouragement afforded by this act was withdrawn, and the consequence was, the manufacturers were at once thrown out of employment and reduced to want.

So disastrous was the effect of this repeal, that it was speedily renewed, to continue for four years.

The business thus protected, progressed rapidly; and in 1508, under Henry VII., an act was passed, prohibiting every article of silk, wrought either alone or with other stuffs, which their own people could make. The violation of this law was forfeiture.

In the reign of James I., silk throwsters and dyers were introduced. *and broad weavers imported* from the continent.

In 1629, the business was so far advanced as to be considered of *national value*, and entitled to an act of incorporation, which was passed, under the name of "The Masters, Wardens, Assistants, and Commonalty of Silk Throwsters!" Continued advances were made, but the machinery employed was very imperfect, and they were mainly dependent upon Italian throwsters for organized and other fine silks, up to the year 1718, when a young and enterprising artisan, Mr. John Lombe, of Derby, undertook an enterprise, at great hazard, by which he hoped to gain a knowledge of the silk throwsting machinery of Piedmont.

Dr. Lardner has the following account of this adventure of young Lombe:

"There were three brothers, Thomas, Henry, and John; the first was one of the Sheriffs of London, at the accession of George II., on which occasion he was knighted.

"About this time the Italians had introduced great improvements in the art of throwing silk, and rendered it impossible for the Lombes, who were engaged in the silk throwing business in London, to bring their goods into the market upon any thing like terms of equality with the Italians. The younger brother was a lad at that time. By the laws of the Italians, it was made death for any one to discover any thing connected with the silk manufacture; with this addition, the forfeiture of his goods, and his person and name to be painted outside the prison walls, hanging to the gallows by one foot, with an inscription, to remain as an indelible mark of infamy.

"Young Lombe, however, was not deterred. On his arrival and before he became known, he went, accompanied by a friend, to see the silk works. No person was admitted except when the machinery was in action, and even then he was hurried through the rooms with the most jealous caution. The celerity of the machinery rendered it impossible for Mr. Lombe to comprehend all the dependencies and first springs of so extensive and complicated a work. He went with various persons in various habits, as a gentleman, a priest, or a lady, and he was very generous with his money; but he could never find an opportunity of seeing the machinery put in motion, or of giving to that careful attention which was his object. Despairing of obtaining adequate information from such cursory inspection, he bethought himself of associating with some clergymen; and being a man of letters, he succeeded in ingratiating himself with the priest who confessed the family to which the works belonged. He seems to have opened his plans, partly at least, to this person, and it is certain he found means to obtain his co-operation. According to the scheme adopted, Mr. Lombe disguised himself as a poor youth in want of employment. The priest then introduced him to the directors of the work, and gave him a good character for honesty and diligence, and described him as inured to hardships. He accordingly engaged as filature boy, to superintend a spinning engine.

"His mean appearance procured him accommodation in the place which his design made most acceptable to him.

"While others slept, he was awake, and diligently employed in his arduous and dangerous undertaking. He had possessed himself of a dark lantern, tinder box, wax candles, and a case of mathematical instruments. In the day time, these were secreted in a hole under the stairs where he used to sleep. He then went on making drawings of every part of this grand and useful machinery. The priest often inquired after his boy, and through his agency, Lombe conveyed his drawings to Messrs. Glover & Unwins, at Leghorn, the correspondents of the Lombes, who made models from them, which were despatched to England in bales of silk.

"After Lombe had completed his design, he remained at the mill until some English ship should be on the point of sailing for England. When this happened, he left the works and hastened on board.

"Meanwhile, his absence had occasioned suspicion, and an Italian brig was despatched in pursuit; but the English vessel happily proved the better sailer of the two, and he escaped. It was said that the priest was put to the torture; but another account states that after Mr. Lombe's return to England, an Italian priest was much in his company, and it is the opinion that this was the priest in question.

"The common account of Mr. Lombe's death is, that the Italians, exasperated at the injury done their trade, sent over to England an artful woman, who associated with Mr. Lombe's Italian servants engaged in his works, and, having gained over one, poison was administered, of which, it is said, Mr. Lombe died on the premises, on the 16th November, 1722, in the twenty-ninth year of his age."

On his return to England, he obtained a patent, securing to him the right to use and dispose of the same for fourteen years.

"The first machine constructed from his drawings, was of immense capacity, and when completed, was capable of turning out 318,504,960 yards of organzine daily.

The building erected for this machinery was five stories high, and 660 feet in length. So much time was consumed in erecting the building and completing the machinery, that Mr. Lombe applied for an extension of his patent; which, however, was refused, on account of its great public utility, but at the same time Parliament voted him the sum of £14,000, in consideration of his eminent services.

From this time the business moved steadily forward, continually increasing in interest as it advanced to perfection.

In the year 1783, their manufactures of silk were valued at £3,350,000

From evidence placed before Parliament in 1821, we collect the following statistics:

There had been imported, for several years, from Bengal, China, Italy, and Turkey, an average of at least 1,800,000 pounds of raw silk, under a heavy duty; and subsequently to this, for eight years, the importation of raw and thrown silk amounted to nearly three and a half millions of pounds annually.

The number of looms employed exceeded 40,000, giving employment to a vast number of operatives, whose aggregate wages, at reduced rates, exceeded £3,000,000.

It was then calculated that nearly half a million of people, directly or indirectly, derived their maintenance from the labor created by this manufacture. The amount actually paid to persons employed in the various branches of the business, was set down at £10,000,000.

In 1825, there were 226 throwsting mills, running 1,180,000 spindles. At Spitalfield alone, there were 17,000 looms in operation.

Since the above facts were elicited, there has been an uninterrupted increase in every department of the business, and it has continued to be the subject of constant Parliamentary watchfulness and guardianship. Every exigency has been provided for. Statutes have been made, modified or repealed, to correspond with its interests; and what is the result? Just what it would be here, or in any other country where a like policy is pursued. The *perfection* and *beauty* of English silks are the *admiration* and *envy* of the world. Under such a "*selfish system*," manufactures must flourish; without it, neither silk nor any thing else can thrive.

These things have their infancy, and need years of constant vigilance before strength enough can be acquired to withstand the competition of older countries, and maintain an independent existence.

As early as 1608, the question of producing a supply of raw silk from their own soil appears to have occupied the attention of Great Britain. It had then recently been introduced into France, to the great profit of that nation; and king James I., who was then on the throne, saw no reason why his own people might not prosecute the industry with similar success and advantage.

His recommendations met with the approval of the inhabitants; and in 1620, there were a large number of mulberry plantations in a flourishing condition; but the humidity of their climate opposed every attempt to naturalize the worm, and the whole matter has long since been abandoned.

These failures at home induced King James to turn his attention to his colonies in America. Accordingly, trees and eggs were forwarded, and competent instructors sent from Europe to Virginia, where the first effort was made.

A writer in 1609 says: "There are silke wormes and plenty of mulberie trees, whereby ladies, gentlewomen, and little children, (being set in the way to do it,) may be all imploied with pleasure, making silke comparable to that of Persia, Turkey, or any other." No doubt was then entertained of the practicability of silk culture in Virginia. So important was it considered, that measures were resorted to, to compel the colonists to commence the business. A penalty of ten pounds of tobacco was imposed on every planter who should fail to plant ten mulberry trees upon every hundred acres of land in his possession. The same act gave a premium of four thousand pounds as an inducement to commence the business; and in the succeeding year, ten thousand pounds of tobacco were to be awarded to the person who should export raw silk amounting to £200 in value.

The cultivation of tobacco, however, obtained the preference, and little progress seems to have been made in silk, though it was continued for many years, to some extent. and it is stated that the coronation robe of Charles II., in 1660, was made of Virginia silk.

By far the most important and successful attempt made under the patronage of Great Britain, was in Georgia. The climate was every way congenial and the colonists were anxious for the undertaking. So elated were they with the idea, that they actually dreamed of supplying all Europe from that single colony.

The substantial facts connected with the Georgia experiments are all that we can give. The most full and authentic account which has been published is found in Harris's Memoirs of Oglethorpe. The first inducement offered to the settlers of Georgia to encourage the production of silk, was the appropriation of government lands for the supply of the best mulberry trees—and additional grants to those who should plant a certain number of trees. This bounty was offered for ten years.

So intent were the authorities upon having the silk industry uppermost in the minds of the people, that the public seal had on one side of it a representation of silk worms, with the words, "NON SIBI, SED ALLIS," *not for ourselves but for others.* The Colonial Trustees introduced silk worm eggs, trees and seeds liberally. In 1732 they engaged a professed silk reeler from Piedmont, M. Amatis, who with several Italian reelers, whom he brought with him. commenced reeling some very fine cocoons raised at the trustees garden, which gave silk equalling in beauty the best of French or Italian production. They were soon, however, interrupted by a difficulty among their reelers; who treacherously destroyed the machinery, trees and eggs, and then fled to Carolina.

The trustees had become too well satisfied of their abilities to make silk, to abandon their work here. M. Camuse and his wife, Italians, with their two children and two other persons, were engaged for six years to take charge of a *filature* at a salary of £520 per annum, besides a dwelling house and garden.

The first silk produced in Georgia, (eight pounds) was carried to England by General Oglethorpe in 1734. Another shipment was made the following year, and the silk manufactured into organzine by Sir Thomas Lombe, who was so delighted with its quality and beauty that, he immediately exhibited it to Queen Caroline, who was equally pleased, and directed that it should be woven into a dress pattern for her Majesty's wearing. At its completion it was appropriately presented by Mr. Booth the weaver, accompanied by Gen. Oglethorpe and Sir Thomas Lombe. At the next birth day of the king, Queen Caroline appeared at the levee in a full court dress of Georgia silk. Governor Oglethorpe returned to America greatly encouraged, and adopted immediate means for a more vigorous prosecution of the business. A number of persons were sent to the filature for instructions in reeling, and a large amount of eggs preserved for the ensuing season. In March, 1736, the Governor, through the Rev. Mr. Bolzius, presented one mulberry tree to every inhabitant.

The Saltburgers, at Ebenezer, entered fully into the views of Oglethorpe, and were forward in carrying out his suggestions, and the result shows remarkable success. The influence of Mr. Bolzius, though he confessed himself disinterested was decidedly favorable, and he did much to induce the families of his parish to cooperate with the trustees. The indifference of this excellent man soon disappeared, for in 1742, we find him one of the most zealous advocates for silk culture in Georgia. Two reels were erected near his house, and the reeling of cocoons commenced with gratifying success.

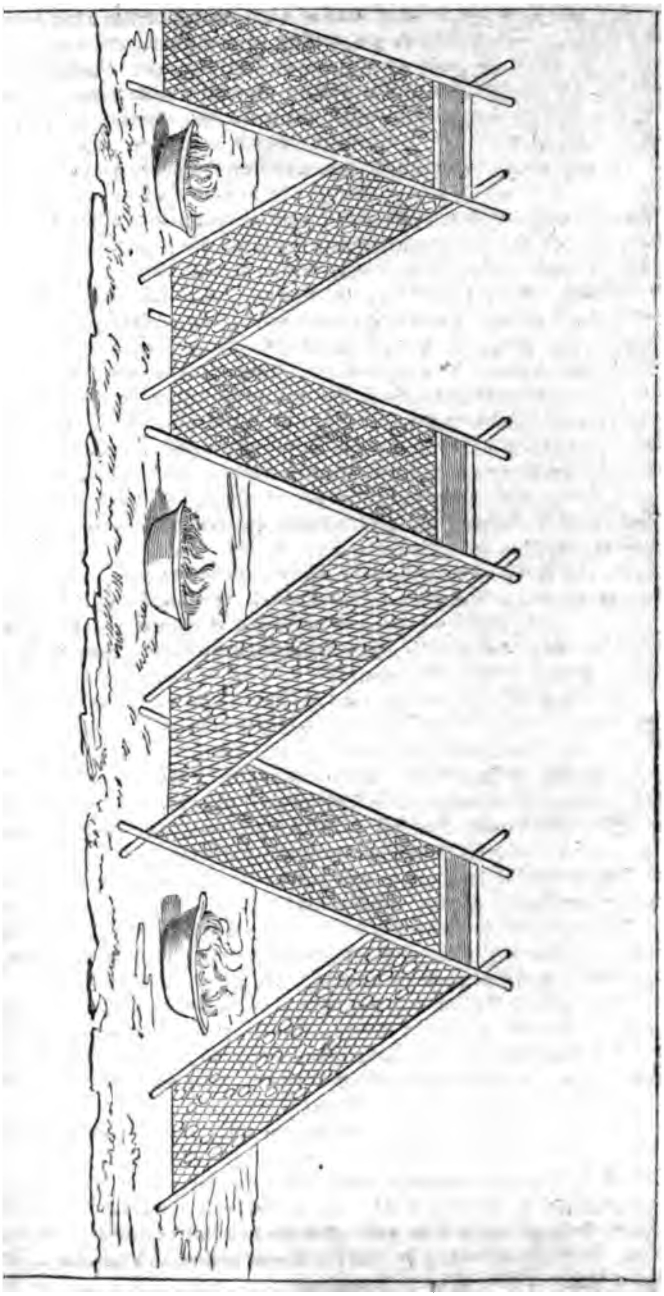
Mr. Camuse saw this, and through envy, withheld the most essential knowledge from the women sent to him from Ebenezer for instruction in reeling. The Germans proceeded with unabating activity, increasing their stock of trees every year. In 1749 the trustees offered a liberal bounty to every woman who should make herself mistress of reeling during the year; and at the same time gave Mr. Bolzius permission to erect sheds for reeling, which was done, and suitable machines provided. Fourteen young women claimed the bounty offered, and engaged in reeling at the filature the next season. Over one thousand pounds of cocoons were raised, and the silk reeled in so superior a manner as to command a higher price in London than that from any other conntry. The growth of the mulberry at Ebenezer must have been remarkable; for we see it stated that trees planted in front of the parsonage, at ten years of age, measured nearly four feet in circumference. Judge Meigs remarked a few days since, when conversing on this subject, that, in passing through Ebenezer about forty years ago, his attention was attracted by the uncommon luxuriance of the mulberry trees. At the request of the passengers the coach was stopped to allow them to collect some of the fruit of these trees, which was then ripe. The judge says "the berries were as large as my thumb and very fine." Many of the trees planted by the Saltburgers, more than fifty years before, were then standing apparently in their prime.

Mr. Pickering Robinson, and James Habersham, in August, 1750, were appointed "commissioners to promote more effectually the silk culture." Mr. Robinson arrived at Savannah in the following December. The first act of the Commissioners was the erection of a public filature which should serve as a normal school for the whole province, from which to send on competent persons to manage private filatures, which it was supposed would soon follow as necessary to complete success.

A large building for this purpose was undertaken in March, 1751, and on the 8th of the May following was in complete operation.

Six thousand three hundred pounds of cocoons were sent to the filature this year, of which two thousand came from Ebenezer, and the remainder from Whitfield's orphan house.

Mr. Robinson devoted himself arduously to the duties of his appointment, proving very satisfactorily to the trustees that the time he had spent in the filatures of France, whither they had sent him, had been well improved in learning "the mysteries of silk winding." Mr. R's engagement with the trustees was for a single year, but he was retained a second year by the local authorities at the earnest solicitation of his associate, Mr. Habersham, who thus speaks of him. "I think him the most prudent, as well as the most capable person, I ever knew, to undertake such a work, and if he could be continued here, I doubt not, that he would turn out a number of well instructed reelers, who would be able to conduct filatures at Ebenezer, Augusta and other parts of the province." Mr. Robinson was appointed an assistant in the government and strongly urged to remain, which he refused to do unless permanent encouragement were extended to the culture of silk, for at least fourteen years. He returned to England in 1752, when his place was supplied by Joseph Ortobughe—a native of Pied-



mont, and an accomplished reeler. Certificates of the excellent quality of their silk continued to reach them every year. The filature at Savannah was destroyed by fire on the 4th of July, 1758, with several thousand pounds of cocoons, and much of the machinery. During the four years preceding this, more than 21,000 pounds of cocoons had been received.

A larger and better building was immediately erected and ready for use early the ensuing spring. This house when no longer employed as a filature, was used as an assembly, or ball room, and also for public and religious meetings, and later, as a dwelling house until March 25th, 1839, when it was destroyed by fire.

Within eight years from this time little less than one hundred thousand pounds of cocoons were received at the filature, a very large proportion of which, came from the Saltburgers at Ebenezer.

Unfortunately, at the very time when public confidence was fixing in favor of silk, and when the continuance of the encouragements which had been given for a few years preceding, bid fair to constitute it a staple; *changes* were made in the prices paid for cocoons, old bounties withdrawn and new ones enacted—until a general uncertainty and stagnation ensued. Even at Ebenezer the business was at a standstill for some time, and required uncommon exertions to revive it; but under the administration of Mr. Wertsch, a patriotic magistrate, the German people were again induced to give it their attention which they continued to do for several years, sending annually to England several hundred pounds of the raw material. The next interruption was that of the revolution; since which it has never been revived to any profitable account.

The last silk offered for sale at Savannah, was a lot of 200 pounds in 1790.

The impression left upon the public mind was altogether favorable.

A public filature for a while existed at Philadelphia, the property of a company organised for the purpose of promoting silk culture.

This was established about 1770, and a large quantity of cocoons were soon received from the surrounding country.

Dr Franklin took an active part in this enterprise. This establishment was never opened after the war.

The only other place where any very decided action was taken previous to the war, was at Mansfield, Ct., where the business in its several branches has been continued until within a few years.

The production of cocoons has ceased from neglect to keep up a supply of good mulberry trees. Much sewing silk is still made there. The business at Mansfield has proved very profitable, for at a time when most of the surrounding towns were insolvent, it was unembarrassed—with money in its treasury.

No man in Connecticut manifested so much active interest in this cause as President Stiles, of Yale College. His experiments began in 1758, by the planting of three white mulberry trees which he very appropriately named A, B, C. These trees in the course of four or five years became very fine and commenced bearing fruit. Every berry was carefully collected by the Dr.'s own hands and the seeds preserved as a legacy for coming generations.

65, this alphabetical nursery had extended to K, of fine grows, and a considerable number of worms had been fed. As a sufficiency of seeds had been produced the Dr. took a journey the country, and distributed them to many; exacting great their treatment, and the return of a certain proportion of trees when they had attained a proper age for transplanting.

nursery at Yale College, was emphatically the "A, B, C," of ure in New England.

dent Stiles continued his experiments with unabated interest ly forty years, and there is now in the Library of Yale College, cript copy of a work on silk written by him, embracing a vast of practical information, the results of his experience.

exactly in the state in which the worthy Doctor left it, bound very string which his own hands had tied, and surrounded by veneration with which respect for the honored dead can

seldom been handled by any except his venerable cotempo- l particular friend, Dr. Daniel Stebbins; who is still living at nced age, in the village of Northampton, Mass. It will be a communication from his pen, in another place, that Dr. S. ins his first love of the silk cause, and is doing much for its ment. He has probably the best nursery of mulberry trees in ed States.

riter has enjoyed many personal interviews with the Doctor subject, and has now in his letter case from him, more than sely written communications of much value.

the close of the war no systematic efforts have been made to the silk industry amongst us; yet there has not been a single which good silk, to some extent, has not been produced; and states, in considerable amounts.

most remarkable period in the whole history of silk in this commenced about 1830, at the introduction of the Morus ulus.

tense excitement pervaded the whole country, in which all were concerned. A few thousand buds of this tree were con- a fortune; and for a while, almost became a substitute for

companies were formed, books written by men without expe- mulberry orchards planted, cocooneries and factories erected. newspapers of the day filled with the prices current, and the f transactions in mulberry stock.

riod was of brief duration, and was followed by a reaction which every thing before it, and left the very name of mulberry and object of general contempt.

articulars of this excitement are too fresh in the memory of ll for a further recital here.

e whole, the *multicaulus mania*, as it is termed, was not with- enefits It was the means of introducing mulberry trees rapid- ghout the states, many of which fell into good hands, and are g an ample reward for the labor bestowed upon them. It is judices were created which still fetter the silk cause; but these must inevitably submit to the irresistable influences of successful experiments which are making throughout the country. An amount of sober reasoning public attention, is certainly turning to this subject, which, regulated by the experience of the past, and the information we are acquiring from the silk producing countries of the Old World; *must and will fix it as a distinguishing staple of American industry.*

The following communications will show that I am not alone in this opinion.

These letters have been written in reply to circulars issued early the last summer, calling for practical information on the subject whether favorable or otherwise.

A large number of responses have been made, the most important of which only are included in this publication. They will be accompanied by such remarks as their contents may suggest.

The first we shall give is from Dr. Stebbins. The great age of the author, being now more than 80 years old, will attach increased interest to his communication and credence to his suggestions. The Doctor has been one of the most active men of his day in all the leading enterprises of the age, and is perhaps one of the most eminent living illustrations of a life of temperance and industry.

His mental health, and the steadiness of his nerve, far surpass those of most persons of the present generation, of half his years.

A. C. VAN EPPS, ESQ.

Dear Sir:—Having had the privilege of President Stiles' Silk Journal several years; in November, 1843, I prepared a supplement and returned it to Yale College, to the care of President Day, in testimony of my approbation and high estimation of the Journal—of its excellency, truthfulness, and accuracy, as applicable to the present day—and its evidence in favor of only *one early* crop and *open feeding* in New England, instead of a succession of crops in *our climate*, attended with sickly worms and inferior cocoons. The Silk Journal is a valuable document, in favor of the practicability and utility of silk culture in America. This, with the recent publication in New York, by Greeley & McElrath, compiled from the most approved and reliable sources, or Treatises on Silk Culture, with the report of the New England Silk Convention at Northampton, and the report of the American Institute, "*The Silk Question Settled*"—these, with other appliances, we hoped might elevate the silk cause beyond the reach of calumny.

Every part of the Silk Journal strengthens and confirms the position *now* approved by silk growers. There has, however, been an improvement in the variety of mulberries, mode of feeding—by use of Gill's cradles, (see cut and explanation, page 425,)—the application of the after foliage for making paper, using the inner bark of the annual sprouts for clothing, cordage, &c., and the perforated cocoons for spinning thread, knitting hosiery, gloves, and making durable clothing; and now, in 1847, using the expressed juice of the fruit to make *mulberry writing fluid;* all of which having been tested, can we doubt of ultimate success? We need not trench upon the ordinary pursuits of the farmer, mechanic, merchant, or man of science. Silk culture, with the due protection of our general and state governments, may become of great national importance and remunerating to individual enterprise.

We annually import of raw and manufactured silks, nearly *twenty millions* worth, and two or six millions worth of rags and junk for paper; which is, in fact, encouraging the enterprise and support of foreign population, while we have the facility and ability to produce both. Such are our national habits of *industry*, *enterprise*, and *mechanical tact*, that we may venture to compete with the cheap labor and cheap living of any portion of the world, for we are *freemen*, enjoying the fruits of our industry.

What has been done in the culture and manufacture of wool and cotton, we may hope to approximate in the culture of silk, by the application of the same untiring industry and perseverance. "Nil est desperandum," should be the motto of silk growers.

With regard to the origin and high antiquity of silk, President Stiles advances an opinion from the lxx. of Genesis, Leviticus, Psalms, Proverbs, Ezekiel, &c. It has been said that lexicographers are of opinion that the Hebrew words *shesh* and *meshi*, and perhaps other Hebrew words, might be rendered silk, cotton, or fine linen, and is sometimes rendered silk, Ezekiel, xvi. 10; clothed thee with silk, Genesis, 41, 42.

In Egypt silk was known, and Joseph was probably clothed with silk. In the time of Solomon, too, (Prov. xxxi. 22) " her clothing silk and purple."

That the mulberry tree was known in Palestine, appears from 2d Samuel, 1st Chronicles, and the Psalms. The valley of Baca, too, may have been so called from the abundance of mulberries, the only tree adapted to make good silk, and is probably indigenous to all climates where silk can be made.

It is believed that the silk worm has been sustained and preserved in open weather from time immemorial, until domesticated by the officiousness of mankind. The silk worm has been exposed to all the vicissitudes of the seasons, summer and winter, so as to crop its food and wind the cocoons upon its favorite tree in the open air, probably from year to year, preserve its species, independent of exposure to devouring insects, vermin, and birds of the forest. This is corroborated by the testimony of *living* witnesses, also by written testitomy. They have been seen on trees in South Carolina, on Mt. Holyoke, in Massachusetts, and in the State of Maine. These facts show that a *remnant* may be preserved and propogated, pass through all the stages of mutation, from the egg to the cocoon, in the open air, from year to year, and perhaps for centuries.

Respecting the most approved kind of mulberries for feeding, and the management, experience has proved that the *Canton*, *Asiatic*, *Broosa*, and *Alpine*, should be headed down every spring, to augment the number of the stalks, the size and number of the leaf, as in China; and if as many pounds of bark silk may be taken from the stalks of an *acre* of close set mulberries as of flax, the culture of the mulberry for the bark silk, of itself, might be a profitable investment.

Quere.—Whether the mulberry tree, its seed, the knowledge of silk culture, originated in Palestine, Egypt, or Babylon, and thence found its way to China, in consequence of wars, removal of captives, dispersion, emigration or captivity of the Jews, Egyptians or Babylonians, or whether it originated in China, and thence passed into Europe, is an inquiry, of use only as evidence of its great antiquity. There is, however, a strong probability that silk was known in Palestine even before China became a nation, their fabulous history to the contrary notwithstanding; and the tradition of the stealthy introduction of silk worms' eggs from China into Italy or Greece, is problematical.

At an early period of settling the American continent by Europeans, the culture of silk was fostered, and with great expense introduced into Georgia, and thence gradually into the middle and eastern States, by the united exertions of President Stiles and Dr. Aspinwall, permanently established in New England, especially in Mansfield, Ct., and in Northampton, and continued to this time, 1847.

The culture of silk was attended with reasonable success and profit up to the revolution, and even during the war progressed slowly, yet surely; so that in the year 1839, it was estimated that Mansfield and vicinity raised *five tons* of raw silk, worth about $500,000.

The white mulberry has been in use until about 1830, when other varieties were introduced, having a larger leaf, and equally adapted to the nourishment of the silk worm and production of silk. Since the introduction of these varieties, there has been a gradual advance in growing silk, until intercepted by the mulberry speculation, so called.

Dr. Parker, of Canton, China, with a native Chinaman, having visited the writer, were shown the Canton foliage, which they recognized as the genuine kind used in China. Dr. Parker was pleased to see so large a leaf, and suggested that our climate was more congenial than even China, to develope so fine a leaf. But being shown a multicaulus leaf, the Chinaman, rapidly passing his fan over the leaf, exclaimed, "*too muchee big.*" During the tree speculation, so called, there was as much fancy about the kind and value of different kinds of trees, as of any fancy goods of the stores and shops.

There was one multicaulus tree from the south, purchased and set out in Northampton, which cost fourteen dollars, and lived two or three years. Young trees here of one season's growth sold usually from twenty-five cents to two dollars, and called cheap. During the tree speculation, there was a tree, the product of white mulberry seed, which developed a larger leaf than usual. Being transplanted from the nursery to a barn-yard near a public road, in Belchertown, it attracted the attention of a mulberry speculator, who gave the owner twenty-five dollars for the tree; removed it into Connecticut, and resold it for fifty dollars, to a man by the name of Sharp, and called the Sharp tree, who esteemed it so valuable that *one dollar per bud* was the price, and declined the offer of four hundred and fifty dollars for one-fourth of the tree, as stock property; but soon the tree lost its value, and was worth no more than an ordinary white mulberry.

During the mulberry excitement, some made, but more lost, money. ose who speculated on borrowed capital, depending on sales of lberries, were induced to offer them at under prices. Those in ilar situations adopted a similar course, underselling each other; nvinced the public that trees were of little value, and finally ruin- the business; identifying the mulberry bubble as one and the ne with the real silk cause.

There were a few instances where money was made in the mulrry deal. An individual of my acquaintance, who had endorsed his friend that failed, having a patch of Canton mulberries, from s than one-fourth of an acre sold enough to lift a mortgage and te, the principal and interest of which would have exceeded ten ousand dollars.

But unpropitious as the silk business may have been a few years st, the prospect, in 1847, is now brightening, and to meet the nessity of the case, trees must be multiplied to a great extent, but t in hot houses, as was done during the mulberry speculation; ch forced plants, or even those raised in very warm climates, proce a sickly plant for New England. People were ready to take trees fast as they could be raised, and no wonder that some were crazed, thout considering that silk might be raised like other crops, and th as much certainty; that the transportation of a pound of raw k worth five dollars, costs no more than a pound of flax or hemp; nce the avantage of silk over most other crops.

If two-thirds of the exports of Italy consist of raw and manufacred silks, and that in France silks are among the most productive urces of revenue, why may not the United States profit by the me course? Our habits of industry, perseverance, and mechanil tact, are in our favor. Our soil and climate are propitious, and ny should we despair of being able to compete with any other peoe or nation in the culture of silk?

We have hundreds of miles of inland over which the wind passes divest it of superfluous moisture, rendering the air pure and connial to the health of worms. In Europe, the loss of silk worms estimated at about fifty per cent.; but President Stiles estimated e loss in America at only twenty-five or thirty, under the then ode of feeding; but with the present improvements, need not exed five or ten per cent, some say less.

That pure air and ample ventillation are essential to the delicate k worm, has been proved by casting away sickly worms, and expong them to the open weather and drenching rains, they have so revered as to make fine cocoons.

Our early crops are generally more healthy, and make firmer coons, than those from a late crop. Gill's cradles are of great adntage to the silk grower. These, with other improvements of the esent day, may be a saving of fifty per cent. to the silk grower. In ew England, we may have early frost to injure the foliage: there is remedy. By saving and drying foliage, pulverizing, moistening and rinkling with wheat or rice flour, the worms will feed as readily as green foliage.

Silk worms' eggs may be preserved, during winter, in any cool, dry place. The ice-house may be too moist, unless the eggs be enclosed in dry boxes.

Among all the varieties of eggs, the pea nut is the best, having less floss and greater length of fibre.

It is humiliating and wholly unnecessary for us to contribute so much, annually, for the article of silk, which is an indirect way to support the population of other countries. If we must support foreigners, why not do it for those who are flocking to our shores to engage in agricultural pursuits in the far west? Let us interest them in the culture of silk. They may be so far from cash markets, that the expenses might render ordinary crops of little value.

The object of the foregoing is to preserve a record of the former and present condition of silk culture in America, and something of what has been done since the days of President Stiles, who, with Dr. Aspinwall and Joseph Clarke, may be considered the pioneers of silk culture in the northern and eastern States, and now revised and corrected for the year 1847.

Little did I think, while a member of Yale College, under the presidency of the Rev. Ezra Stiles, D. D., that when approaching him, by the distant manners of that day, with hat under the arm, and doing obeisance to his person, enveloped in his brown American silk tagos, that I should ever follow him so closely in his favorite amusement of silk culture.

It is sincerely hoped that some friend should write out and deposit records of the state of silk culture with the President of Yale College, for the time being, at least every twenty or twenty-five years, and especially at the end of the present century, to be preserved in the archives of the College, where is the Journal of President Stiles, the *nucleus* of American silk culture; that reports of the state of silk culture in America may be kept in *perpetuam*. The sequel of silk culture in the United States may be very important to the country, and to carry out the object of the subscriber in all coming time.

DANIEL STEBBINS.

NORTHAMPTON, September, 1847.

REMARKS.

What is here said of "heading down" mulberry trees, needs notice. The advantages apply equally to other varieties also. For this purpose the trees are planted in rows, about five feet apart, and about two feet apart in the rows, which should always run north and south to expose equally to the sun. The cultivation should be principally by means of a hoe, or if a plow is used at all, it should be a very light one, (a narrow cultivator is good) and in the middle between the rows. Preparatory to a plantation the ground should be clean, and mellow by deep and repeated plowing, and well supplied with vegetable manure. The plants then take deep root and are easily cultivated. The late foliage generally will keep the soil in good condition, and is probably the best fertilizer that can be employed for this purpose.

We have preferred to remove the sprouts late in the fall, after the foliage has fallen and preserve either for planting in layers the following season, or composting for manure.

It is now probable that, by a recent discovery for separating the fibre of hemp and flax, the firmer bark of the mulberry may be obtained, which will render the after growth of great value.

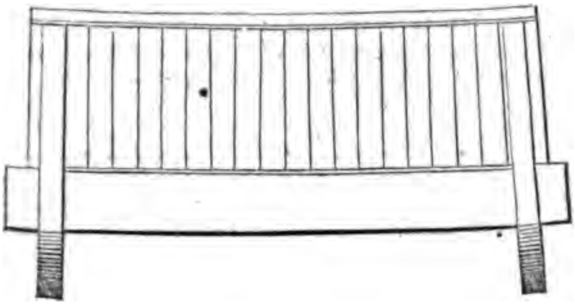
The leaves should be carefully drawn up on the roots of the trees before winter sets in. The sprouts start very early in the spring, furnishing tender leaves for young worms, and by the time of the fourth moulting, are sufficiently matured for cutting down for branch feeding which is the practice now by the most successful feeders. A few inches should always be removed from the tops, as the leaves there are too watery for advanced worms.

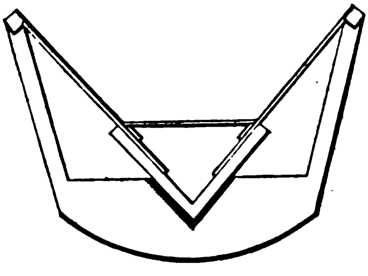
As regards the use of mulberry leaves for paper, we doubt whether for fine paper it can be bleached sufficiently white.

It makes a very strong paper for wrapping and is valuable as a place of deposite for silk worm's eggs.

GILL'S PATENT VENTILATING CRADLE.

SIDE VIEW,





END VIEW.

"The size of the cradle must depend upon the form and extent of the building. To suit a shed or building fifteen feet wide, the cradle should be twelve feet along, and have three rockers four feet long, made of plank fifteen to eighteen inches wide, and about one and a half thick. A trough, made of two boards, joined at the bottom, and spreading one foot at the upper edges, with one end open, is to be fitted into notches in the center of each rocker; this forms the bottom of the cradle. From the end of each rocker, a post two and a half feet long extends upwards, inclined a little outwardly. A narrow strip of board runs along the ends of these posts, to which, and to the upper edge of the trough sides, lath are fastened half an inch apart, on which the branches, cut up in pieces about one foot long, are laid.

"Feeding in the cradles commences when the worms are about half grown, or immediately after their last moulting; where they remain until they spin.

"Care should be taken not to give at once more leaves than the worms will eat up while fresh, as, otherwise, a surplus is left to dry up, litter the trough, and obstruct ventillation.

"The cradle should be gently rocked at each feeding, thereby removing all impure air from about the worms and branches, and shaking down the dry leaves and excrement into the trough, which is washed out by occasionally pouring in water at the open end. The motion of rocking is very agreeable to the worms, being similar to that of the branches, when feeding in a state of nature.

"Another advantage is, that no worms can fall through the trough to the ground; those that happen to fall in the brush, crawl to the sides and ascend to the top at pleasure.

"The worms readily spin among the branches, making but little floss, and seldom double cocoons. By fenders on the rockers, mice, rats, &c., can be prevented from injuring the worms. The sheds and cradles are cheap, easily constructed, and meet all the wants of the worms, which are, protection from storms, birds, &c., pure air, cleanliness, regular feeding with fresh nutritious leaves, and to be undisturbed by handling, and to spin their cocoons when ready.

"They curtail the expenses more than *one half*, and *double the quantity* of silk from a given quantity of worms, over any other mode heretofore practiced."—*Gill's Circular.*

REMARKS.

The advantages claimed by Mr. Gill for his cradle, at first strike the reader as too great to be fully realized; but the inventor assures us, as do others who have them in use, that the picture is not overdrawn. Our own experience, too, in the use of them, confirms the statement as far as the principle is concerned. We think, however, that a cradle with higher rockers, say two feet, without a trough, and the bottom one-half wider, would secure all the *advantages*, and avoid some objections. It is rather inconvenient cleaning the trough, and even when this is done, it remains damp, with litter sticking to it, which soon moulds, and causes an offensive effluvia. Besides, with the greatest care, the bottom sometimes becomes clogged with litter and excremental matter.

These objections occurred to us on first seeing the cradle, and though our experience in the use of them has been limited, it has not served to lessen them much.

We must attribute this, in part, to want of care, as Mr. Gill assures us that, when properly managed, no such objections exist.

Individuals are authorized to use them throughout the term of the patent, as they please, for $10; application to be made as per advertisement in this Review.

The next paper we shall publish, is from the pen of the Hon. Joel

Poinsett, whose familiarity with silk production in Europe, and ightened and practical views of the industry and economy of own country, entitle it to candid consideration.

THE HOMESTEAD, GREENVILLE, S. C.,
Sept. 17th, 1847.

Dear Sir.—I have received your letter of the 4th instant, asking to give you my views and impressions whether favorable or not, elation to the culture of silk in the southern portion of the United tes, and at the same time asking of me such suggestions of a pracl nature as my acquaintance with other silk growing countries, l what I have noticed here may enable me to offer.

f I did not think favorable of your efforts to recommend the cule to the people of the south, I should not have ventured to oppose opinions to those of a person, who like yourself, has been long upied with this important subject. But thoroughly persuaded of *practicability* and *importance*, I cannot refuse my feeble aid to urge the introduction of a new staple likely to prove so advantageous to r country.

You are aware that this matter has frequently occupied the ious attention of Congress, and that there exist several luminous orts on the subject of raising the silk worms and reeling and owing the silk. I have not access to these reports at this time, have I here a paper published by Mons. D. Homerque at Philaphia, under the patronage of our distinguished fellow citizen the Wm. Duponecan. They contain the most ample instructions in ation to rearing the silk worm and reeling the silk, and if these rts have hitherto produced so little effet, it is to be in some meae imputed to the peculiar character of our people. We of the th are neither *patient* nor *persevering*, and can seldom be brought ndertake any enterprize which it requires more than a season to omplish. As it requires 152. lbs of mulbery leaves to make one nd of reeled silk, the trees must be cultivated on an extensive le before any considerable establishment can be formed, so that erto silk worms have been reared, and silk spun more as an usement than an occupation; and the morus multicaulus has been tivated with a view rather to its *sale* than with any intention of lying its leaves to their legitimate purpose. Both the morus Alba the morus multicaulus succeed perfectly in these latitudes, and h ordinary pains the silk worm might be reared and the best silk ained throughout a very extensive portion of our country, wherer the trial has been made on a small scale by careful hands. *e never known it fail*; whereas, most of the large establishments nded to produce silk for exportation have failed both in England in our southern country.

The reasons for this in both countries are probably the same; an ufficient number of trees and want of attention to the temperature he rooms where the worms are fed. Where the practice of rear the worms is followed rather as an amusing occupation, than for rposes of gain, the rooms may easily be kept of a proper temperae, say 64° Fah. for hatching, and 70° to 75° while feeding, and at the time of spinning, raising the head a little every day. It is stated in the fifth volume of the transactions of the society for the encouragement of arts, that a person had successfully reared thirty thousand silk worms, when in the beginning of July, just as they were about to spin, there came a chilly northeast wind, and many assumed the chrysalis state without making any attempt to form a protecting cover.

I have myself seen many worms destroyed by being kept in buildings constructed of thin boards and exposed to great alternations of heat and cold.

In an account which I have seen of the silk culture in Lombardy, where nearly the entire population are engaged in it, for a stated period every year, and where the husbandmen purchase the eggs and the mulberry leaves from the large proprietor, it is said that, "in every house room is made for laying out the worms as soon as any symptoms of life appear, and that even in the poorest cottages with but a single apartment, it is so contrived that some space is allotted for them, and the inhabitants shift as well as they can during twenty or thirty days. Tables of reed are formed about two feet and a half in breadth and ten to eighteen feet in length. These are suspended from the roof, the upper shelf two feet below it, and others at a foot distance, the lowest of them two feet from the floor. The windows are made of paper to prevent currents of cold air and too great heat: the shutters are of straw, and the door consists of a piece of old linen cloth. Within; the place is kept in darkness, except when the worms are to be fed, or the place cleaned out; when lamps are used. In many of these places thermometers made for the express purpose, are kept to ascertain the temperature. They are made of spirits of wine and show no other change of heat than that between the 18th and 20th degrees of Beama equivalent to 68° and 76° of Fahrenheit, to which limits it is deemed necessary to confine their range of temperature." With these small producers who furnish the greater quantity of silk, the labor for the most part, ceases with the formation of the cocoon; for they generally sell the cocoons to other persons, who make the winding and throwing the silk a *distinct trade*. There are, however, some few establishments in which the silk worms are reared, and in which the thread is wound off and all the operations completed to fix the silk for market.

Notwithstanding a great portion of the silk prepared in that part of Italy is consumed within the country, the *exports* of this article were estimated ten years ago, at upwards of *fifteen millions of dollars*, and it appears from late accounts that this culture has been steadily increasing ever since that period.

I have been thus particular in describing the silk culture of Lombardy, because it appears to me best adapted to this country. In the upper districts of Virginia, the Carolinas and Georgia, there are many small farmers who might nurse the silk worm if there existed in their neighborhood *establishments for reeling* and preparing the silk for market, with *extensive mulberry groves* and a regular *supply of seed*, affording a ready market for the produce of their labor and an abundant supply of the raw material. These establishments for reeling and preparing the silk for the manufacturer, are the more necessary from the *skill and judgment* required to select the different kinds of silk produced by one batch of worms. We observed at Lyons that the cocoons were divided into nine distinct classes, and great care taken to reel off each class apart.

After all, it is to be feared, that the culture of silk will be introduced very slowly in our country. Like that of the vine, the olive and the cork oak, all well adapted to portions of our soil and climate, the mulberry requires time to arrive at maturity and until our population becomes more dense and our habits more settled to a permanent residence in our *birth places*, we shall continue to give a preference to the culture of such fruits of the earth as are produced by our annual labor.

Your ob't servant,
J. R. P.

Two subjects of vital concern are introduced in this communication. The one having reference to the temperature where silk worms are feeding; and the other to *markets for cocoons* and *nurseries* for the supply of trees, seeds, &c. They are topics which have been repeatedly treated by us during the last five years. In regard to the former, we have given it as our opinion, that all buildings used for this purpose, should be so constructed as to place the control of the temperature entirely in the power of the superintendent. This is particularly important in all latitudes subject to sudden changes, and there are few portions of the United States where it is safe to overlook it, inasmuch as it can be done, and still admit of a construction affording the amplest ventillation.

North of the latitude of Washington, it becomes quite indispensible; south of it, it would at least be safe.

We think very favorably of the Chinese oven before described or something similar.

In saying that means for producing an artificial temperature are *indispensible;* we wish not to be understood as intimating that silk cannot be made even in cold climates without any such arrangement for we have evidences of remarkable success in all the states of the North where no artificial heat has ever been introduced; and in our own feeding, large crops have been fed, with no protection from cold or light, save a simple tent with a roof of boards and sides of canvass. But in all these cases, there have been interruptions and delays occasioned by cold nights and mornings and chilly days during storms of rain; when facilities for retaining a temperature of 75° to 80° would have been very gratifying to our dormant families, besides materially lessening the term of labor and securing in the end, (probably) a fuller and better harvest.*

*** It has been proposed to employ electricity as a substitute for heat and some interesting experiments have been made by a distinguished electrician of Brooklyn, to whom application having been made for the facts in the case, the following answer was received.**

BROOKLYN, Sept. 30th, 1847.

DEAR SIR.—Your letter, dated yesterday, has been received, and in reply I

We have recommended, as well adapted to the objects desired, a building of the following description.

Single story buildings, or sheds are preferable to any others.

A convenient size for a single *home*, would be about 100 feet long by 25 feet wide. If the plantation be large, several sheds had better be put up in different parts, than to risk the health of a whole family of worms, by single buildings of larger dimensions.

A cheap mode of construction would be to place square posts at six or eight feet apart for the sides, and central posts for supporting the roof ten to twelve feet apart. The roof may be made of boards or shingles as preferred. The sides and ends should be made in the form of venitian blinds, of boards six to eight inches wide, and three fourths of an inch thick. The pivots can be made to play in holes in the posts, and the whole made so as to entirely shut out both light and air, or to admit them in any quantity desired. Besides this enclosure it would be desirable in the more northern sections of the country to have straw mats, corresponding to the space between the posts, filled on rollers like window shades, that may be lowered at any time, and would make a comfortable house in cold weather. It will readily be seen that a building, such as we have described, can scarcely be open to an objection of any kind. With the blinds slightly opened, and the ventilators in the roof raised a few inches, we have a draft of fresh air from all directions, without the annoyances of too much light or unequal currents or gusts of wind. When too, the wind is strongly blowing from any quarter, the blinds on the exposed side may be closed.

It would be well to allow the eaves of the roof to project two or

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would remark, that, the silk worms on which my experiments were made, were born in the last of May. During the early part of June, cold weather prevented the growth of the mulberry foliage and they had to feed for four days on garden lettuce. This important change caused the death of many and impaired the health of the living. On the 17th of June a full supply of good leaves were obtained.

The worms were then placed on clean hurdles and insulated by glass supports, and covered with sheets of strong twilled silk to intercept a too free circulation of air through the hurdles. They were kept in a dry room properly aired, without artificial heat, trusting to the spontaneous influence of the season.

About 1500 healthy worms were distributed on three hurdles. One hurdle, separated from the rest, and insultated, was supplied with fresh leaves. A large electrical jar being connected with the leaves at one end by means of a metalic rod and gradually charged from a cylindrical electrical machine, were roused from their torpid state and commenced eating voraciously. Their activity continued about an hour, when they appeared to have eaten enough. The electrical insulation was repeated at each feeding, when not prevented by a very damp state of the atmosphere, until June 28th, when many of the worms manifested a disposition to mount and spin, when they were furnished with cabins of brushwood which were soon well filled by my industrious family. They finished their cocoons fully a week sooner than those fed on the other hurdles, with a corresponding difference in the quality of their cocoons.

An electrical machine, having a 10 or 12 inch cylinder, and a leyden jar of about three gallons capacity, and about 4 square feet coated surface and other accompanying apparatus, in the hands of a judicious manipulator, would be sufficient to attend upon 50,000 worms, and keep them in a healthy action. I was much pleased with the experiment and believe it may be of consequence to silk growers to give it their attention.

Respectfully, Yours,
JESSE EVERETT.

ree feet to prevent water falling too near the house, and also to ield from the rays of the sun in very warm weather. Nurseries for ung worms, similar to those used in China, should always be furshed in one end of the building. The east end is preferable.

Of the other subject alluded to viz. *establishments for purchasing and eling the cocoons* and *nurseries for furnishing trees, seeds, &c.*—we ave much to say, more by far, than our space will here allow: for pon *these* the success of the *silk industry* in any country, is *solely* and *tirely dependent.* And to the fact that, the attention of this counry has been directed to any thing and every thing else, *rather* than these—is alone attributable the *other fact*, that, we are not at this day producing silk in amounts equal to other countries. Is not this the case? Where has the existence of a public filature, possessing any confidence, failed to secure cocoons in considerable quantities in the shortest time allowable?

Such a failure is not on record. It was so at Savannah, Philadelphia and Mansfield, and has been so in other places.

The great wonder has always been, where the cocoons came from! Otherwise, why have silk producing nations, always sought *first*, by royal authority, to establish markets in which their people might trust and filatures to which manufacturers might look for silk well and uniformly reeled? The reason, obviously, is the same that has induced the French nation, and this year more than ever before, to establish in every district of France, where cocoons may be produced, permanent markets and filatures supplied with well qualified reelers.

Most of our states have given bounties at one time and another, for the production of cocoons, but simple bounties, unless they be large enough to afford a fair compensation for the labor of producing them, will not create cocoons.

It is as unreasonable as it would be to offer bounties for raising cotton, without a single gin or mill for its manufacture.

We venture to assert here, as we have often before, that no state will raise any considerable quantities of cocoons, with or without bounties, until *State Filatures and Nurseries* are *established* accessible to farmers.

And we venture *another* assertion: that when any state or the states generally shall have adopted a system supplying these defects, our people will not be slow in performing the agricultural part of this work; nor our nation *long* inferior to others in the prosecution of any part of the silk business.

To show in what light others view this subject, we include here some translations made for our use, by the Hon. Henry Meigs, Secretary of the New York Farmers' Club, and Recording Secretary of the American Institute of New York.

AMERICAN INSTITUTE, September 10, 1847.

Extracts from the *Annales de la Société Sericicole*, founded in 1837, for the propagation and amelioration of the Silk Industry of France.

Of the Reeling and art of taking off Silk from Cocoons.

This brief treatise is just received from France, by the hands of *Alexander Vattemare*, for which the Institute, on behalf of the United States, are thankful.

TRANSLATION.

If the mulberry could be easily cultivated in the center and north of France—if the *education* of the silk worm is sure of success, why have the efforts to establish the silk industry in these districts always failed? It is because the growers of cocoons have been unable to surmount *the difficulties in the reeling of silk.* It is because the silk they have made, being almost always *unequal* and of bad quality, could not find a market; so that too much presumption, and attempts ill managed, have ended in discouragement. Upon the reeling, then, must be concentrated *all perseverance*, all the energy of the men who now-a-days determine to naturalize silk industry in the north; and it is by studying the best methods, by forming *good reelers, above all other things*, without which they never can have good silk. Under these circumstances, the want of an elementary work, capable of teaching young reelers, is imperiously felt. An old reeler of the south of France, M. Ferrier, who, for more than thirty years, has been occupied nearly sixty times every year, in the department of the Herault, and who has constantly attended to the *education* of silk worms and to reeling, in the north where he lives, has made this Manual. He attaches himself, above all things, to the positive and useful practical methods. He begins by pointing out the manner in which we ought to judge and manage the cocoons before reeling, the *suffocation* of the worms, their preservation, their transportion, their selection; nothing important is omitted, and he enters into full details. After some general considerations, he describes the different operations of reeling—the mode of beating the cocoons and purging them—the formation of the *butt ends*—the mode of keeping the *butt ends*—the encroisure, (crossings.) Drawings are given of the various operations—a new plan, capable of supplying the wants of actual machines. He points out the quantity of silk which a reeler can furnish daily. He recommends order, neatness, and regularity in the reeling. He recommends *reeling establishments, central* to the *growers of cocoons.* We believe his work to be one specially conscientious.

Manual of Ferrier.

The reeling of cocoons is one of those things which theory cannot teach alone; it requires practice. However, it is possible to give new reelers some salutary rules; and I am about to try to give them. Scientific researches are not in my plan—they are out of my reach; and we know that experiments made in a cabinet may occasion deceptions, when the same results are expected in a general and positive operation. Far be it from my thought to contest the services which science may render to industry; nevertheless, it is true, that the greater number of operators who have made discoveries, were practical men.

and theories may lead to error, but a judicious practice, which and reflects, must lead more surely to success. In a word, hould aid practice, but practice alone can decide in a sove- ınner, what is most advantageous to the manufacturer, and l procure him the greatest benefits.

ʒoing to give the whole experience of my life. I never form- ;em, nor do I present any discovery. I have no other object ›int out the *elements of reeling*. I shall speak of what I have self and have seen done. It is *in vain to raise cocoons or plant* *es* until the art of taking the silk off the cocoons is extensive- ı. The silk growing establishments in many of our provinces y in Touraine, which have been abandoned, *would have en-* *ose Provinces if they had possessed regular and well conduct-* *ng establishments !*

I repeat, are the principal motives which have led me to this I have tried to be as clear as possible, so that I might be un- by the most inexperienced, and I shall esteem myself happy succeeded. Before I treat of reeling, I shall first speak of ›ns. What I say is founded on the experience of myself and tional experience of my family.

Of Cocoons.

irst attention of the reeler must be to the cocoons, because › bad and some good, some superior and some indifferent. It sible to point out the way of *judging of their value exactly be-* *reeling, and the most experienced are sometimes deceived.* r, I may be allowed to give some precepts which may guide grower as to the qualities of the products obtained—and the s to the cocoons he should purchase. One of the first guaren- ›od cocoons is the success of their education. When the worms :n well managed—when they have been sheltered from the in- ariation of temperature—when they have received frequent *equal periods, not interrupted by fasts*, when they have con- one but leaves *free from humidity and fermentation*, and last- their moulting has been simultaneous and rapid, one may count g excellent cocoons. The essential condition of a good co- nsists in its being *good stuff* and furnished with silk, which ifested by its equal and regular form, *by the firmness and re-* *to a light pressure on all its parts, but principally at its two* ere the resistance to pressure is always greatest. A fine grain, d close, are good signs.

ı, after having thrust the hand into a heap of cocoons, one a handful, and when we find in all of them an equal resist- pressure, when in drawing out the handful we find a long ›nnected with the *Blaze* or Bouvre. If they weigh heavy in d, and when in letting them fall on the floor, they give a ke that of falling *nuts* we may felicitate ourselves, *for such are* *:oons !* When *feeble at their ends* or even *at one end* they a sad condition, because being first exhausted of silk at that ıey are penetrated by the water and can no longer be reeled so that the balance of the stuff on them is lost. These are the [illegible] or *glassy* which produce the waste, vulgarly called in the south of France *Bassin-at*, that is *sink in the basin.*

A great inequality in the form and in the degree of strength of the cocoon, indicates bad education of the worms, which have suffered. The silk from such is very indifferent.

Where we find them light, stale, giving no sound when shaken and in which the chrysalis is decomposed, giving a fetid smell, an indifferent silk is expected, as to quantity and lustre.

If the cocoons taken up lightly in the hand, bend under the pressure of the finger—if they remain *crumpled* together or produce a sound like dry parchment, if they give no sound except a dull one in falling on the floor, *they are weak in silk!*

When the sound given by the chrysalis is sharp and unequal, and when the cocoon is very light, we must examine whether this does not proceed from the chrysalis having been *muscardinée* (*attacked by a sort of moth;*) for that circumstance would be fatal to the producer, who should sell it, because the chrysalis would have lost all its weight almost, and this too would be very injurious to the reeler, for it often happens that the worm attacked by the muscardine, spreads through the inside of the cocoon a whitish matter which sticks together the whole tissue; in such case all reeling is impossible. *A loose grain, unequal and shining* in cocoons is always suspicious, such are the *satinés* (like satin.) *The size of a cocoon* is not an infallible mark of good quality. Generally, we prefer an *uniform and medium size.* As in all other things, there are exceptions to this rule. Weight is a favorable indication—the fewer cocoons to the pound, the greater the quantity of silk, but before we weigh them we must be sure that the chrysalis has attained its proper state. When the worm has finished its cocoon, he remains still a worm and keeps his weight which only diminishes in proportion to the accomplishment of his metamorphosis, and we must take care how we destroy them before they attain the state of chrysalis, for they will then communicate to the cocoon a kind of softness and humidity. This is so well understood at the south of France, that when the existence of the worm is demonstrated by opening a certain number of the cocoons they constitute a case redhibitoire.

We always require before we receive such that they shall have passed at least six days on the Bruyère (heath) after backward worms have been taken from the hurdles.

Cocoons are, as every one knows, yellow or white, and it is good that the respective colors should be pure and uniform. Many reelers pretend that the white ones are more delicate, requiring more caution in reeling—and this pretence is not without foundation. But a fine color raises the price of silk and is a benefit. A very serious inconvenience sometimes presents itself with both colors, and that is the difficulty of reeling them and the breaking or frequent cessation of the thread. And on a first examination of cocoons, nothing can indicate this ruinous condition, because it is never manifest until the cocoon is in the basin, and at the moment of reeling. In such a case, the only way to lessen the injury, is to use other cocoons of firmer silk, because a more iderable number of cocoons forming the thread, the reeler has e facility in keeping it even and regular.

ouble cocoons, which contain more than one chrysalis produce a ut loss. Being formed of a tissue crossed in opposite directions y are confused and cannot be regularly reeled. We get from such, lk called *Douppious* the price of which is hardly the third of that ood silk.

udden cold or heat injures the cocoons while forming, and a varia- temperature also. Want of proper ventilation is another evil— t of good and regular food makes weak and irregular cocoons. h cocoons are those which contain living chrysales. We can reel , but the time for doing it is very short, for we know that after ty or twenty-four days, according to the warmth of the air, the salis become butterflies, soften the cocoon at one end, and make a through the tissue and escape. We therefore must hurry the ng, for when the cocoons are once pierced, we cannot reel them in asin.

is to be regretted that the circumstances under which this trans- n was made did not admit of its being more complete.

n the same subject, Judge Meigs has furnished us the following, translated by him, from the O Auxiliador Da Industria Nacional io Janeiro, January, 1847.

The production of cocoons is absolutely *worth nothing* without the nisation of filatures. The raising and collection of them become ces of depression and disgust, where there is no means of sale or re. To send them to Europe to be reeled is totally impractica-

he *production* of cocoons and their *reeling must* be organized at *same time;* and we affirm without the fear of being mistaken that filature is the greatest difficulty for us to conquer. The best od to obviate this evil will be to establish filatures central to the ers of cocoons."

e shall next call attention to the letter of Mr. John S. Peirce, of lingten, Vermont. The name of this gentleman has often been re the public in connection with his exhibitions of silk. There no difficulty arisen which his perseverence has not overcome. t has been considered most remarkable is, that, all this has been mplished so far at the north; and yet, he makes no complaints in rd to climate—but on the contrary, believes silk culture compara- n profit and ease of execution with any other pursuit of the agricul- t. Letters containing the details of experiments made in the st parts of Maine, and in terms of equal confidence, have often sent us; and there are now in that state, quite a number of far- who testify that the *silk departments* of their farms, give better ns for the labor and outlay devoted to them, than any other.

BURLINGTON, Sept. 8th, 1847.

. VAN EPPS, ESQ.

AR SIR.—The press of other engagements has prevented an earlier to your favor of the 11th ult., and I cannot now attempt to go any thing like a detailed account of my experience in the silk business. I can only give you a few hints, which, if given to the world through you, may be of some service to my countrymen. I have been engaged in silk culture for five years and with uniformly good success. The only exceptions have been when, in one or two instances I have come short of foliage. And, although, when I commenced I had never seen a silk worm, and not a person in the place had ever seen a silk reel or a skein of reeled silk, I have succeeded beyond my most sanguine expectations, in all I have undertaken. In talking the matter over to my wife, we concluded that, as we were Yankees, nothing need be feared, we could in some way find out all about it; and so we went at it, guided rather by common sense, than any knowledge we could obtain from books.

The first ounce of eggs fed by us produced more silk than is often obtained by the most experienced feeders—(about 100 lbs. cocoons.) My wife then set about the reeling of them, and before three pounds were reeled, had conquered the principal difficulties, and now finds it easy to reel 1¼ lbs. per day, 10 fibres such as you saw at the Fair.

I have been trying some experiments this season with the various kinds of leaves. It has often been said that it would not do, in feeding worms, to change from one kind of mulberry to another, often.

To ascertain the effects of such changes, I have purposely changed the food nearly every day from their hatching, and have never had worms do better. I have used the White, Broosa, Asiatic, Canton and Multicaulus, and believe it of no consequence what kind they are fed on, so you give them enough of any or all kinds.

With regard to the profit of raising silk, I have seen nothing yet to make me doubt that it may be made better business than ordinary farming; and if we can raise it in the north of Vermont, profitably, I am sure it may be good business in the middle and southern states.

One word about raising trees. Having tried almost all the varieties that grow in our climate, I am fully satisfied that, the white and Broosa, rightly cultivated, are better for us, than any other.

They should be raised from the seed, and set in hedge rows. I have fed this season from a plantation three years old; and it would have done you good to see the quantity of leaves produced. I have cut them mostly down to the ground both last year and this. Where they were cut last year they threw up this year a great number of shoots, five and six feet high, which have been cut again this year. In this way I think we can obtain more foliage from an acre than could be obtained from large trees, and it is not a fourth part the labor to gather it.

I remain your obedient serv't,
JOHN S. PEIRCE.

REMARKS.

Mr. and Mrs. Peirce have been exhibitors of cocoons, reeled and woven silks in the Fairs of the American Institute every year since they commenced the business, and have always received the highest premiums, for which they have competed.

At the last Fair Mrs. Peirce exhibited a piece of over 60 yards,

› silk pocket handkerchiefs, twilled, which, for the beauty and ction of their finish, were acknowledged by the best judges to ›d any article of the kind ever offered in this market.

iis piece of goods received a premium of $50, the Van Schaich il, and a *gold medal* from the Institute. She has before received ·al gold medals for smaller quantities of similar goods, as well as :ocoons and reeled silk. A considerable amount from the Van ich fund also, has before been awarded to her. It is proper here mark that the Hon. Myndert Van Schaich, of this city, who has ifested great interest in the introduction of silk culture and manuire in the United States, came forward about three years since and generously placed in the hands of the American Institute the of one thousand dollars, to be appropriated in hundred dollar iiums upon raw and manufactured silks.

he influence of this encouragement has been salutary and gratifyin the extreme.

ie following from another section of our country, will be read with ·est, as it comes from the pen of a gentleman of intelligence, and who is familiar with the subject and country of which he speaks.

LOUISVILLE, Oct. 10th, 1847.

:. VAN EPPS, ESQ.

EAR SIR.—Your letter, requesting some information on the present : of the culture and manufacture of silk in this section of the south southwest, and my views thereon, is received. I reply with sure, though circumstances necessarily compel me to be brief.

ı Tennessee and Kentucky, and particularly in the mountain ɔɪʟs, the business is steadily and successfully progressing; though . One individual furnishes annually to the manufactory of Messrs. ᴋson & Gray of this city, (where a ready market for cocoons and silk, at fair prices may be found,) several hundred pounds of reelilk. His crop for this season will exceed that of any former year. ers in this immediate vicinity, have also produced increased quans of silk. The worms of the several crops of this season have been rely free from disease.

am informed that great efforts are being made to establish this ness in some of the cotton growing regions of the south.

ı view of the great acquisition of cotton growing territory to our ɔn, it is evident that the price of this staple must forever be re›d to barely a remunerating standard. It it then the wisest policy ıe south to diversify as much as possible her products, and I know o branch that can be introduced with a fairer prospect of success ı the culture of silk.

, is admitted on all hands, by those who have investigated the sub, that silk must at some future period become one of the great les of our country.

hen the emancipation of slavery in Virginia, Kentucky and Tennesshall take place, and the consequent influx of a different class of ılation; these states will become the great central region for the luction of this crop.

ne of the essential requisites to the successful prosecution of business *in the south*, is an intelligent, persevering, and ever watchful superintendant. If this department can be properly supplied, I can see no reason why the growth of cotton and silk cannot be conducted on the same plantation to the greatest advantage. The worm crop will come on in the early part of the season, when the females, the young and the aged, who are usually employed in the picking season, are comparatively idle; or at least can be easily spared from other pursuits, will serve to gather leaves for large crops of worms; and the product of their labor more than doubly augmented.

The labor generally, from the introduction of this branch of industry upon the cotton farm will not be materially increased. The land required is comparatively little, and the cultivation of the trees, after once established, is much less than would be required for the same amount of land in corn.

The uniformity of the climate of most portions of the south is such, that shed or open feeding would best suit the habits of the worms, insure to them a greater degree of health, and relieve the superintendant from much of the care required in close apartments with artificial heat.

Among the numerous emigrants to this country, no doubt, there are many from the silk growing countries of Europe, whose services are required, and might be advantageously employed in the south and west. Though from the peculiar adaptation of our climate to the nature and habits of the worm, some modification in their treament will be found necessary, which any intelligent attendant, with the aid of such works on the subject as can be procured, will readily learn to apply.

We use the morus multicaulus in the first ages of the worms. After the last moulting—the age in which the material composing the silk is elaborated, we employ the white Italian and Canton varieties; as they abound more in the elements of silk. The latter is superior to the Italian only in the increased size of its leaves. The morus multicaulus possessing this advantage in a still greater degree, while it is better suited to the condition of the worm in its earliest ages.

If my humble efforts will in any way aid you, or advance this silk enterprise, please at any time command them.

Very respectfully your obedient serv't,

H. P. BYRAM.

Mr. John M. Summy, of Manheim, Pa., in a late letter says:

I am not in the habit of writing, and must therefore say little. This county has been producing silk for some time, and we find no great difficulty in making cocoons. In this neighborhood several farmers are engaged in the business. The mulberry principally used is the multicaulus which all consider the best. I have thirteen acres of trees, and shall this season make over two hundred pounds of reeled silk. My mode of feeding is not peculiar. A few words will explain it

I give my worms plenty to eat, ample room and free access to fresh pure air.

I feed many in shanties, and *prefer out door feeding*. For spinning the cocoons, I use bundles of long straw.

do not get as much for our silk as formerly, but we can feed ch less than half what it used to cost us. Instead of picking ves as formerly, we now feed with branches, and even whole which reduces this part of the labor, before very cumbersome, to rative pleasure.

one need undertake this business unless he cultivate his trees rise the quantity and quality must be inferior.

as been demonstrated again this season by one of my neighbors, rom 25 to 30 bushels cocoons can be produced from an acre of

ther gentleman Mr. A. H. Rice; of the same place shortly after :

ve been engaged in the silk business six or seven years, and am surprised that, any man who is willing to labor for a fair remu- n should become discouraged, or hesitate about engaging in silk e. I have always been successful in feeding when I have had ndance of foliage, and I consider my silk crop as certain as that . My crop this year amounts to more than seventy pounds of silk. I convert all of my silk into sewing, and have to pur- more as I work up from six to ten pounds per week.

REMARKS.

se are the results of experiments in, what would be supposed ost unfavorable region of Pennsylvania. Their winters are long vere, and their feeding season short, subject to cold nights and ngs and heavy dews. Yet these men, and others in the same y, whom we know, have been steadily and profitably pursuing mployment for years, and appear as much at home in its prose- , as others do, in the raising of wheat and corn; and certainly es *quicker* and *better* returns. Take for instance Mr. Summy is thirteen acres, producing 200 pounds of reeled silk, worth at per lb, (the price he received) $900 00. Deducting $300 for penses of raising, reeling, cultivation of orchards, and interest pital invested, which is a very liberal allowance, we have a s of $600, or about $50 per acre, profit.

are much mistaken, if farmers generally, in our country are not atisfied with profits of one quarter this amount.

o not hesitate in saying that Mr. Summy with his thirteen acres lticaulus, and a few rough shanties, will make more money than at farmer in Lancaster county, will get from fifty acres from or- y crops.

d when we consider the difference in the capital invested, and the f production, the comparison stands as almost ten to one in favor .

have given the facts in the case, and the comparison is a fair

w what is the secret of this success among these German farmers r. Stewart's state?" Why should they thus outstrip other and favorable districts of country, and fill their pockets with pelf, their next door neighbors grow poor? Why! first of all -

filature is opened, and it is understood that the man who produces cocoons, can take his whole crop at once, even a large crop, and, by driving over to Mr. Eberly's or Mr. Summy's, exchange them for money or its equivalent, with no further delay or trouble; while others, after getting their crops into a marketable shape, have to cart them load by load 10, 20 or 50 miles through the mud, to market.

Another consideration, the importance of which has been almost totally overlooked, deserves our attention here. It is the *acclimation* of the silk worm and mulberry tree to that particular locality. It is a subject we have carefully studied, and find it universally true that where any variety of worm or tree has been continued for a succession of years in the same latitude, there they become most perfect and thrive best. If this be so, it would be well for every grower to obtain eggs of the best species of silk worm and seeds or trees of the best mulberry, and devote themselves to their *acclimation.*

We will next give the testimony of a distinguished silk grower of Georgia, whose attention has long been enlisted in favor of silk; and who nearly ten years ago could boast of having an entire suit of silk, the handiwork of his own family.

MACON, BIBB COUNTY, Sept. 2d, 1847

A. C. VAN EPPS, ESQ.

DEAR SIR:—Your letter of the 7th August, reached me in due time but the pressure of other engagements has prevented an earlier answer. The reason I have not corresponded with you as much as usual of late, on the subject of silk culture, has not been owing to a decrease of interest, but because I had said so much, and written so many letters on the subject, and so little apparent good had been effected.

I had therefore made up my mind to do what I could with silk in my own family, and say nothing more about it; and had I not been called upon by yourself or some one else, I should have remained silent; and now I write more to gratify you than with the expectation that much good will be the result.

I might say that Georgia is one of the finest countries in the world to produce silk, and speak of the great benefits to be derived from its culture, but this every body here knows as well as I do; no one disputes it. On the contrary it is believed to be *so easy* a thing that were our planters generally to engage in it, the market would be *glutted.* And this is actually urged as an objection,—I have heard it again and again. That such reasoning is unfounded, need not be said —but if such a thing could be possible, this is the country, and we are the people to accomplish it; could we be induced to give it our active attention. We have amongst us, a vast number of idle persons, useless to themselves and every one else, who might be most profitably employed in making silk. I have hoped to see the day when the multitudes of idle youth and men, who now annoy the country and vitiate society, would be engaged in making silk, but I begin to doubt its realization.

We are now using silk for both summer and winter clothing and find it better and cheaper than any thing else.

Some very fine vestings have been shown me lately made in the family of an adjoining planter, which sold readily at $4, a pattern.

When I reflect upon the evident advantages which might be derived from this pursuit, and see how men are spending their time and money in the pursuit of objects of trifling value, I can scarcely suppress my indignation.

Respectfully Yours,
A. C. ERNEST.

REMARKS.

We are happy to state that the example and influence of Judge Ernest have not been in vain. We might name several persons in Georgia to whom we have forwarded mulberry tree seeds, silk worms eggs and silk machinery during the past year, and it is safe to conclude, from indications we have received that, a speedy revival of the silk interest will take place at no distant day.

We can give place to but one other communication from the south. The writer, Hon. P. H. Green, has made himself practically acquainted with the culture of silk, having made several successful experiments n Maine and other parts of New England, and we understand, inends at some future day to establish himself in a favorable location at he south.

DONALDSONVILLE, LA., July 12th, 1847.

DEAR SIR :—I am just in receipt of your letter, having been absent or some time to Mississippi city, and New Orleans. I am glad to know that you have selected as a medium for your communications a ournal in the city of New Orleans, and shall be disappointed if they re not the means of calling public attention to a subject of vital importance to the state.

In reply to your query, "What you deem important to say on the ubject, as to the natural adaptation of our country, particularly the outh, for the culture of silk," I have to observe that, since my residence at the south, but one practical fact has been settled in my mind which is, that foliage can be produced abundantly here, indeed a large proportion of land in the northern and western parts of this state, not sufficiently rich to produce sugar or cotton, is, I have no doubt admirably adapted to the growth of the mulberry tree, and I am not repared to say that those sections are not as well adapted to the culure of silk generally, as any other region of the globe.

But one objection presents itself, which is the humidity of the atmosphere, and this unless I have been misinformed is quite different rom what it is on river lands, being much less humid. It seems to me that long before labor in the United States is as cheap as in the ld countries, silk will rank among our most important productions—what section will produce the largest proportion is to be determined ereafter. I am inclined to think that it will come from the middle nd southern states. In my humble judgment a great error was committed in the early cultute of silk in this country, which has been connued down to the present time, that is, the idea that it requires lit or no skill to raise silk—that old men and children can do it, &c. This is true to a very limited extent, the labor not being so important as it is nice, requiring careful mathematical as well as chemical calculations.

In order to cultivate silk successfully we must have a sufficient supply of good foliage, sufficient ventilated space, proper attendance and an appropriate temperature. With these silk can be produced any where, without them, no where.

With regard to temperature, I believe it has been ascertained by actual experiment, that from 70° to 80° is best for silk worms, and that the highest point matures them in a shorter time than a lower degree, and that they then make more and better silk. The silk worm is a native of a warm climate and must have a warm climate, *natural or artificial* to make it thrive well.

With great respect, your ob't servant,
P. H. GREEN.

A. C. Van Epps, Esq.

Portland, Aug. 29th, 1847.

Dear Sir:—Yours of the 16th came duly to hand, and right cordially did I receive the information of the prospective advance in the silk culture in the southern portion of the states. Not only at the "South," but also, a "still small voice" is giving encouragement at the North, if we take the general expression, and extended inquiry and observation, as a messenger.

The few, who have withstood the cold battling scorn and sarcasm which has been so rife for a few years past, will soon be looked up to as the permanent friends of their country. It is only the Roman firmness that can place the silk cause on a permanent foundation. The motto, "that what we see we know," I think will soon give Yankee enterprise a jog that nothing can stop until we see on every farm a plantation of mulberry, and a portion of the family directed to the employment of silk-growing. To comply with your request I must refer you in part to my letter to the American Institute for 1845, with this added, that my operations still encourage me and that every year I can improve in my manner of feeding and produce cocoons of increased value as to quality—also produce the worm at maturity without finding diseased worms, which was the case this year. I do not think I had 100 in my whole crop this year. Plenty of room, fresh air, strict cleanliness, and a good supply of firm fresh leaves as often as every hour is the secret.

What I should say as theory, is just what I should certainly put in practice.

What the introduction of cotton has, the silk cause must suffer, and after years of patient toil, we shall see the silk of *America*, not only save the millions which we expend and throw into the lap of monarchy saved to pay American operatives, and draw forth American skill and ingenuity, until like our cotton fabrics, we will surprise the "*old world*" by the exposition of our silk fabrics in Europe's great metropolis, after paying charges and duties (not free trade) cheaper than those of their own manufacture. What! says one to me the other day! We make silk cloths in America? What total ignorance are our people in? Could the people of the states be generally informed through the press of the extent to which the silk culture and manufacture is carried on, I think there would be greater action both *national* and individual.

It is only by disseminating knowledge on any department of industry, and the American people will give thought to it; for it seems instinctively true, that the Yankees are ready for any thing they can see a dollar in. Could there be a statistical form given of the probable amount of raw silk produced annually, also of manufactured goods, in connection with the number of manufacturing establishments, and the amount of raw material used—what proportions American and what foreign, and the comparative value of American over foreign, in dollars and cents, and the expense of raising cocoons, their value in market, &c. &c., and those statistics published by our most widely circulated weekly journals, I think we might soon draw into the field a strong corps of enterprising men, who will push the cause along until it shall be no more the theme of ridicule.

With silk as with cotton, it has barriers to surmount; and those a public opinion; for information can be obtained from the experience and philosophical treatment of the worms by very many who have given the subject their study. Again I will say, let the cocoonery be open for a free circulation of heaven's blessing, pure air; next feed often with fresh and well matured leaves; often—once an hour; a strict and thorough cleaning both shelves and room; the shelves cleaned by changing; the worms spread so as not to be crowded on the shelves—plenty of room, and after the last moulting feed on branches cut. You will recollect last year I gave information of a rack swing I used for branch feeding; this year I used it as a stationary rack, by nailing boards on the standards for my shelves and laying loose sticks upon them three or four inches apart, then putting the branches upon them. Now then sir, any one who will follow these directions need not fear but that they can grow the silk worm successfully. As for the profit; I think it will equal any other agricultural operation.

No one need expect that they can become vastly rich in one or two years *merely because they are in the silk business*—but perseverence will give *good returns.*

E. S. BARTHOLOMEW.

A. C. Van Epps, Esq.

REMARKS.

The author of the above is located in one of the coldest parts of New York, where his trees are much exposed to the rigors of winter, and where he is very liable to interruptions by untimely frosts; yet he has been one of the most successful feeders in this state.

His cocoons have been forwarded to our filatures, and are very fine. Quite a number of farmers in the western part of this state have prosperous silk departments connected with their farms, from which they are realising good profits. The undertaking was induced by the existence, for a while, of a filature at the state prison at Auburn.

This enterprise, unfortunately, was sacrificed to party changes, and many who had been led to plant out orchards of mulberry trees, soon abandoned them, and the business has generally ceased except where partial markets have been offered.

A few of those who were most largely engaged in the business, acquainted themselves with reeling and several hundred pounds of reeled silk are received here yearly.

The probable product of raw silk in this state, at the time the prison market was discontinued, must have been several thousand pounds. Much that is now made is worked up into sewing silk and fabrics of various kinds. We shall here terminate our correspondence. More than one hundred other letters are before us received within the past few months, from various parts of the United States and the West Indies. They express but *one opinion* on this subject, that of *universal confidence.*

We speak advisedly in saying that, *our people are ready for the work*, and will promptly second any well directed action of the National or state governments. The question then arises, in what way *can* our authorities render the most efficient aid ?

The only course we would suggest for Congress, and it has been most thoroughly tested, would be to imitate the example of England. Protect by *liberal duties*, all classes of silk which we are capable of manufacturing, *so liberal* that the advantage shall be unquestionably on the part of our own people. The *raw material* should be admitted at a very nominal duty until our manufactories are firmly established and the *culture* of silk pretty generally adopted.

We have already intimated the course to be pursued by the states individually.

But more particularly. Every state should have its filature, of sufficient capacity to receive and dispose of all the cocoons offered for which cash should be paid.

This should be established in a central location, most accessible to all parts of the state; and connected with this should be a nursery, of at least fifty to one hundred acres of the best varieties of the mulberry trees, from which to supply, *freely*, all applicants residing within the state, who upon receiving the same, would become obligated to employ them in a manner prescribed by laws regulating the management of the filature and nursery.

This establishment would not require a large appropriation, and after five years would pay all its expenses, and yield a *surplus* as a *sinking fund*, for the reimbursement of the state.

The *foliage* from the nursery, *alone*, would be of immense value if properly employed. Even at the moderate calculation of one half of what has been shown to be a *reasonable product* from silk culture, we should have a revenue of no mean amount.

The filature, too, would not be without its *profit*, and it is believed that the *paupers* of the state might be made to perform the principal part of the labor of both departments.

With such a *pre-inducement*, *bounties* for the production of cocoons might be offered with advantage—otherwise, *all legislation*, in the opinion of the writer, is *utterly futile.*

With these suggestions we leave the subject with our fellow citizens, in the hope that its great importance may be duly considered, and such measures employed as shall ultimately lead to the establishment of the *silk industry* as a permanent and profitable pursuit of our people. The *curing*, *transportion* and *reeling* of cocoons, and the *preservation of worm eggs*, will be made the subjects of another article to appear in a future number of this review.

ART. III.—THE SCIENCE OF HISTORY.

Introduction to the History of Philosophy, by Victor Cousin, Professor of Philosophy, of the Faculty of Literature of Paris. Translated from the French, by Henry Gotfried Linberg. Boston: Hilliard, Gray, Little & Wilkins. 1832.

[CONTINUED.]

After the long though by no means irrelevant digression, in our last article, concerning Spinoza's pantheism, which led us somewhat out of the domain of philosophy into the sterile realm of theology, we will now return to M. Cousin and continue our analysis of his system of philosophy.

According to our author's theory, we have seen that humanity develops itself by means of its own instinctive wants; that these instinctive wants possess an inherent activity, capable of making an effort from their own centers: and that by their own innate vigor they move forward into acts, deeds, realities. These wants, with their realizations, as we have already shown, our author has enumerated categorically. From this view of the case, it will also have been perceived that humanity works alone and on her own funds, without any aid from Providence except in a general way. We now proceed to the examination of Cousin's analysis of human reason, and the reduction of its elements to the formula of which he makes so much use in this book.

The rigorous and scientific analysis of the elements of human reason has been several times attempted, although our author notices but two serious efforts of the kind. It first belonged to Aristotle to penetrate into the depths of human reason, to submit it to the same scalpel which has produced the history of animals, to determine and to describe all its elements, under the denomination, since so celebrated, of *categories.* Dr. Reid, in an elegant little treatise, affixed to the end of one of the volumes of Home's "History of Man," has dissected and given a clearer insight into this portion of Aristotle's obscure Logic than can be had from any other source, not excepting Aristotle himself. In this *jeu d'esprit* of the Scottish philosopher, written at the instance of his friend Lord Kames, Professor Reid explains the intention of the *categories* or predicements to be, the mustering every object of human apprehension under ten heads: for the categories are given as a complete enumeration of every thing which can be expressed without *composition* and *structure*; that is, of every thing that can be either the subject or the predicate of a proposition. So that as every soldier belongs to some company, and every company to some regiment; in like manner every thing that can be the object of human thought, has its place in one or the other of the ten categories; and by dividing and subdividing properly the several categories, all the notions that enter into the human mind may be mustered in rank and file, like an army on the day of battle. Thus, the whole furniture of the human mind is presented to us at one view, and contracted, as it were, into a nut-shell.

A regular distribution of things under proper classes or heads, is, without doubt, a great help to both memory and judgment. As the philosopher's province includes all things human and divine that can be objects of inquiry, he is naturally led to attempt some general division, like that of the categories. There are two ends that may be proposed by such divisions. The first is, to methodize or digest in order what a man actually knows. The other is to exhaust the subject divided; so that nothing that belongs to it shall be omitted. Reid enumerates several attempts at this kind of reduction, since the decline of the Peripatetic philosophy, as substitutes in the place of the ten categories; none of which, however, he considers as more perfect. Locke, for instance, has reduced all things to three categories; to wit, *substances*, *modes* and *relations*. In this division, time, space, and number, three great objects of human thought, are omitted. The author of the treatise of Human Nature has reduced all things to two categories; to wit, *ideas* and *impressions*. We will not here mention Peter Ramus and many others who have tried to remedy the imperfection of philosophical divisions by introducing new modes of their own. These are futile efforts at substitutions for, or reductions of, the famous Aristotelian categories, scarce worthy the passing notice we have given them.

A similar enumeration to that of Aristotle was attempted by the distinguished German, Kant, and in nearly the same technical language. These two great analyzers are presumed to have exhausted the statistics of reason. Cousin closes the list after them, and proceeds to the reduction of these elements, manifold, diverse, and complicated as they may seem to the superficial observer, to three categories; to wit, the *infinite*, the *finite*, and the *relation* of the two. These then are the three presiding and ruling ideas or principals of human reason. These three ideas, that is, the idea of the infinite, the idea of the finite, and the idea of their relations, constitute the formula of reason or the formula of thought; and all the constituent elements of human reason are reducable to this simple and single formula. We have not the space to enlarge upon this topic but must content ourself with simply stating our author's proposition;—for those examples by which it is illustrated, and for the manner in which it is unfolded, the reader is referred to the work itself.

Having ascertained what are the constituent elements of human reason, we know exactly what are the constituent elements of eternal reason, of intelligence in itself, therefore of God; for these three

in their unity and triplicity are in fact God himself. Now
on can take place only in accordance with those principles which
se the divine mind. In that divine mind we recognize these
ideas; hence these three ideas must be reproduced in all the
of creation. The eternal world, the intellectual world, the
world must all come under the dominion of these three ideas.
s there are no other ideas in the divine mind, so no other ideas
xist in the world or in humanity. And again; humanity can
est no other ideas in its deeds or acts, that is, in history, but
re-exist in human reason; and as no other ideas can or do
n human reason, so there can exist in human history no other
ese three ideas. We know now *a priori*, what we are to look
the history of mankind.
re are also other extreme consequences which, by a most
logical inference, may be fairly deduced from this proposi-
to wit, *the infinite development of human intelligence, and the*
perfectibility of human nature. As no other elements exist
divine mind but what are to be found also in the human intel-
e; and as the former is the type and original of the latter, ac-
g to which the latter is to manifest and fashion itself; it is evi-
hat the reach of the divine mind is the only *terminus* of human
gence; and towards this terminus the human intelligence must
ximate to eternity. As this is also the condition of human na-
ve may thence deduce, by a parity of reasoning, the indefinite
tibility of human nature; viz., a capacity for a degree of per-
n that is only to be defined and limited by the divine nature.
l, this doctrine has been professed, in all its length and breadth,
so many words, by no inconsiderable number of first rate
. "As physical life itself, with its given bounds, presented an
ion, which threatened to beat down this hypothesis at a single
the chimera of perfectibility has been pushed to the extreme
uring us, that the physical life of man might not only be ex-
l more or less, but, that the progress of natural science and of
philosophy might prolong it almost indefinitely;" so that we
arrive almost at immortality in this world, and attain to a de-
f knowledge equal to that possessed by deity. This, if we mis-
ot, was roundly asserted by Condorcet, and has of late years
e quite a popular and common place sort of declamation, habi-
ven in the mouths of the vulgar, and to which recent discover-
d inventions seem to give a kind of air of probability. We are
are that this belief, apart from the false philosophy which lies
bottom of it, is other than a harmless delusion, more redolent
ity and presumption than of any serious mischief; while, as a
tra, it might inspire men to execute great deeds, which other-
would not be attempted from a belief that they were impracti-
We must, however, do Cousin the justice to say that he de-
atly any such inference, and disavows the doctrine *toto celo*;
another place he says, "The development of man's intelligence
infinite, it is finite; *it is measurable by the nature and the reach*
it intelligence itself." The latter member of this sentence,
we have placed in Italics is totally unintelligible and inappl

cable when taken in conection with the first portion of it; for it does not appear that *the nature and the reach* of this intelligence is finite any more than it is infinite; and indeed he elsewhere, in numberless other passages, gives abundant reason to infer, that he considers man, as a recipient of life from God; and humanity as destined to manifest the infinite perfections of the divine essence. Here, therefore, is an evident contradiction which no kind of logic can reconcile.

The condition of history is time, difference, succession. The different elements of human consciousness are developed in history by the hand of time, only on condition of their existing successively; and consequently on condition that each of them shall make its appearance, one after the other. This is an inevitable consequence of *reflection;* for we must here state that the development of the human intelligence is of a two-fold nature; it is *spontaneous* and *reflective;* what is meant by these terms will be seen as we advance. The *successive* appearance in history of the different elements of human reason, we repeat, is an inevitable consequence of the reflective method of its development; for *reflection* can lay hold of or contemplate but one thing at a time; and what *reflection* is to the individual, *history* is to the human race. These three ideas, then appear upon the stage of history successively, one after the other, and in the order in which we have named them. The separate and complete development of one of these ideas constitute an epoch. As there are in human reason but three ideas to be developed, so in history there can be but three epochs; to wit, the epoch of the infinite, the epoch of the finite, and the epoch of the relation of the two. When one epoch has been completed it gives way to another, or rather is *forced* off the stage; for an epoch does not, of its own accord, retire voluntarily from the scene, but is compelled with fire and sword, to give room to the new epoch which is to succeed it. When all the epochs have been completed, the circuit is renewed; each reappears and disappears in the same order as before. The external forms or visible symbols into which each of these epochs develops itself are, its industry, its government, its fine arts, its religion, and lastly its philosophy.

We are reluctant to question the accuracy of so close and lucid a reasoner as M. Cousin. It is with fear and trembling we arraign his decision before the tribunal of criticism—for while charging him with error and inconsistency, we are not sure we are not betraying our own ignorance of the vast scope and comprehensiveness of his philosophy. Indeed, we would rejoice to be convicted of ignorance, if by that means his philosophy could be proved to be infallibly true; for we could then indulge the hope that at least a modicum of peace would visit the mind, sufficient to satisfy for a season the incessant craving after a knowledge which, like a mirage, seems doomed to recede before us and to escape us as fast as we approach towards it. Nevertheless we must proceed, wishing rather that we should prove ourselves wrong than that we should prove him so.

No man can be, or seem to be, more zealous in the cause of freedom, human and divine, than M. Cousin; he every where asserts

es the freedom of man. We will now ask. does the hu-
ely, voluntarily undertake to develop these ideas. and to
m in the order named ? Does it undertake this task
designedly, intentionally ? Nothing of the sort; the
is perfectly innocent of any such intention. It neither
hing of what it is doing. nor does it exercise any will, or
scretion in the matter; nor has it any power to refuse to
develop them. Cousin demonstrates the *impersonality*
ason at the same time that he asserts the freedom of man;
onstrates the one by contrasting it with the other; and he
enumerates. and codifies, as it were, the fixed. eternal,
tory laws of reason. which enter into it to control and rule
as reason enters into man to control and rule over him.

n; reason is impersonal; it belongs not to man; it is an
power which is extraneous to him. and enters into him
rn him by compulsion. We will here take no notice of
ction which Cousin assigns to reason. viz.. its spontaneous
ts reflective action. for it will only complicate without elu-
remarks. Reflection. according to Cousin, originates no-
als only with the contents of memory; it is retrospective
l that reflection can do. that is. human agency properly
to cast its eye over the past, clear up. explain. and legiti-
has been; reflection adds itself to that which was. it
upon that which is. but it creates nothing. This, then,
in our strictures, to the spontaneous reason, which origi-
ngs; which is the eternal and changeless type and exem-
ings: which. in manifesting itself in the facts of human
ces for itself. and dispenses entirely with impersonality,
will or freedom: which. in point of fact. carries away
soever and howsoever it pleases. or rather not as it pleases,
g to the inward necessity of its own being: for if provi-
sent in history. it must manifest itself there by necessary
y consequence. providence must be as important to resist
humanity itself is. M. Cousin is particular to admonish
es the admonition with great force and vigor. that all the
an history must pre-exist in the spontaneous intelligence;
y. in the impersonal reason. It follows, then. that the
an history. as far as man's will or freedom is concerned,
mpersonal in their principle and origin as reason itself;
so in their principle and origin. but equally so in their
s or *actual* existence: for according to him. men are no-
than unconscious agents employed by the impersonal
ecute a purpose of its own. a medium through which it per-
were. and gives its own inherent facts to history; that is
gh which it actualizes the three ideas or elements of which
d.

y, we repeat. renders the facts of history as impersonal as
is. which originates them: that is, the acts which men do,
h history takes cognizance. are not their own voluntary,
and deeds. but are the acts and deeds of the impersonal
nust therefore themselves be impersonal. If, therefore, all

the events which transpire in the history of humanity are imp
that is, do really come from God, and are not the free, consc
untary acts of individual men. What in this case becomes
liberty ? Where is his free-will ? And if God manifest hi
history only by necessary laws which are as obligatory upon
upon humanity. Where is God's liberty ? What, in this
ask again, becomes of human responsibility ? What becom
responsibility of individuals ? This theory, if true, sweeps aw
many cobwebs, all preconceived notions of rules and laws,
and duties, implying the idea of *obligation*, obedience, and
bility. Responsibility is a consequence of freedom, and re
freedom as its base. One cannot exist without the other; as
generates responsibility, so responsibility implies freedom.
not be responsible for that which they cannot control, or
which they do unconsciously and without the intervention of
will of their own; yet we have seen that in the spontaneou
of reason, which Cousin makes so efficacious in human aff
cannot possibly have any free action of their own; for in t
they might choose to act in one direction, and reason in an
such event, the two contrary actions would neutralize each o
immobility would result. M. Cousin leaves no room here fo
doubt; he is particular and explicit in his statement, that
tanity we are not active at all, but passive, that we are siezed
ried away by a force not our own, a force which we are im
resist, and of which we can give no account. This doctrine
ly identifies the actions of man and the actions of God;
makes them one and identical, and is pantheism outright,
least, very much on the declivity towards "pure pantheism
according to this view also, there can be no *crimes* commit
by nations or individuals. Indeed, our author, in the lofty
Optimism which, he says, he does himself the honor to profe
acquits the History of Humanity of all manner of *blame* wha
expressly forbids us to find fault with or to complain at
which may transpire in the life of the race, for we would t
cuse humanity and Him that made it. If humanity in the
can do no wrong, then neither can individuals; for humani
up of individuals; and as this theory abrogates *crimes*, it
gate also meritorious acts, and abolish the doctrine of re
punishments. These are some of the extreme consequenc
legitimately deducible from our authors premises. If the
prepared to admit their truth, then he may be matriculated
of the Eclectic school of philosophy.

But the consequences of our author's demonstrations are
True, he does not, in so many words, abolish individual resp
he does more—he abolishes individuals themselves. Histo
knows no individuals; there are no individuals in histor
face of this declaration, and much more to the same purp
nominates history the drama or epopee of the human race.
very reasonably enquire, how this can be ? In annihilating i
the human race is annihilated along with them; for, we jus
human race is made up of individuals, and exist only in an

nd individuals are eminently *personal* and complete in
lity. As, then, according to Cousin, there are no indi-
least as history does not concern itself with individuals,
e drama or epopee of the impersonal reason; and, in-
acterizes history as the *last counter-stroke of the Divine*
rberation of the agency of God.

equires a theatre, a stage, where it can be performed—
ere for that purpose. Upon this theatre somebody must
form the piece—this somebody is humanity. Masses are
n of humanity; they fill the stage of history, but figure
dumb show; the part they perform is mute, and they
peak, the expression of word and gesture to some emi-
als who represent them. Then, PLACES, NATIONS, GREAT
e the three requisites for the performance of this drama,
ady prepared beforehand, and the parts all written out,
which are mere puppets moving at the will of the mighty
o stands behind the scenes and pulls the wires that give

nothing is insignificant; every thing has some meaning;
as a reason for existing, its idea, its principle, its law.
f ideas is hidden within the world of facts; facts in
nd looked upon only as to their exterior surface, are in-
ut impregnated by reason they manifest the idea which
, they become reasonable and intelligible. The first
hilosophic historian, therefore, is to ask facts what they
ideas they express. If every thing express some idea,
Nations, Great Men are, all of them, but the manifesta-
one of those hidden ideas which the philosophy of history
e and bring to light. Therefore, every place, every ter-
nts necessarily an idea, and by consequence one of the
which have been referred all ideas. A place represents
a of the infinite, or the idea of the finite, or the idea of
the finite to the infinite; such is the formula which the
history imposes upon every place; and such is the for-
ir author pledges himself to draw forth from every given
hysical geography of any country being given, he will
what will be the subsequent history of its inhabitants;
at will be their qualities, their national characteristics,
t they will act in history;—not accidentally, but neces-
, any particular epoch, but in all;—in short, what idea
e called to represent. Places, therefore, like every thing
ir laws: and when a place bears a specific character, it
bly to a specific development of humanity. Very well;
e how this theory is sustained by facts already recorded
is valiant before the future which cannot refute it; let
e so puissant in the presence of the past which has a
n speak for itself.

phical positions of Egypt, of Greece, of Rome, of Jerusa-
mained the same since those ancient times when such
, which by their vastness seem to dwarf the modern
world, were being enacted in them. All these coun

tries occupy precisely the same latitudes, and retain precisely the same configurations, the same climates, winds, waters, &c. now as then; it would therefore follow, according to Cousin, that their inhabitants must necessarily possess the same qualities, and must enact the same part in the drama of history now as then, for the rule holds good through all epochs; and yet. Is this true? Do the present inhabitants of these countries occupy precisely the same page in history as did their ancient population? Do Industry, the Fine Arts, Government, Religion, and Philosophy give for the same or similar results in each or all or any one of these countries? Let us interrogate them *seriatim.*

Can *modern* Greece offer to the admiring historian her parallels for Miltiades, Pericles, Plato, and Alexander of the *ancient?* Can she give to his glowing pages fit substitutes for the Thermopylae. the Marathon, the Platia, and the Salamis of the olden times? All these places are still in Greece, and are eloquent of the *past*, but dumb as to the deeds that have been enacted upon them since, lone and solitary in their former grandeur and fearless of future rivalry. Is modern Athens the seat of learning and the home of the Fine Arts? Have her inhabitants the same philosophy, the same religion, laws, manners and customs as had the ancient inhabitants? Does a Demosthenes still thunder from her forum, or an Appelles speak from the canvass, or an Aristotle preside in her Academic groves? Alas, her oracles are mute, her temples are in ruins! The bat and the owl brood undisturbed where once stood the tripod of the inspired pithoness. "Eternal summer gilds them yet; but all, except their sun, is set."

Rome, too, the eternal city! still sits upon her yellow Tiber. Is she yet. as of yore, the mistress of the world? Where is now the military spirit that formerly animated her indomitable legions, and that hurled them like thunder bolts (*Legio fulminatria*") over an affrighted earth! She once had a Scipio, a Sylla, a Marius, a Caesar, and a Brutus. She has them no longer; her Gracchi sleep the sleep that knows no waking, and will never be revived in their descendants. A mighty change indeed has come o'er the spirit of her dream. Her mail clad warriors and helmeted heroes have been replaced by mitired popes and hooded monks. She is nought now but the grave of giant empires; a mighty tombstone in sublime loneliness amidst the living world, girt about forever by its own desolation.

In Jerusalem, too. the mosques and the menarets of the Moslem now stand where once stood the temple of Solomon; and her Davids her Solomons, her Ezras, and her Herods, are unrepresented and unparalleled in her modern chronicles. The pyramids of Egypt, which sit like everlasting mountains on the Arabians and Sybian sands, looking out in solitary grandeur upon the silence and desolation around them, still remain but to attest the vast disparity between her present history and the history of her Pharoes. In none of these countries then, have Industry, Art, Government, Religion, and Philosophy, developed themselves the same in one epoch as in another. The American continent presents a still more striking illustration of the fallacy of this doctrine; for a greater disparity cannot be imagined than exists between its present inhabitants and its aboriginal occupants, or between the epoch which is now ruling it and the epoch which ruled it under the dynasty of the latter. But let us return to our author.

Nature precedes humanity, and anticipates the laws of humanity; that is, humanity appearing in the bosom of nature has impressed upon it the same laws which governed its antecedent; that is, they both represent the same idea, and must represent it by the same rules. Countries precede their inhabitants, and anticipate the moral laws of their inhabitants. All countries represent an idea or ideas; the inhabitants who appear in them must represent the same idea; for the country imposes its laws upon its inhabitants; hence, the country being given the idea dissolves itself. When a given people presents itself to the philosophy of history, the first question to ask that people is, what idea it represents. As we have just seen, the same interrogatory was propounded to the country, and the country responded correctly as in duty bound; its inhabitants now are presumed to be no less complacent; and in truth they do both reveal the same idea. In all this, it will be perceived, no account is taken of, or allowance made for, differences of race; the geographical laws are peremptory, and fashion the inhabitants, be their race or origin what it may, after their own type and model; the country is the mould into which the people are cast, and the people must come forth fashioned precisely after the form of the mould. We fancy, however, our American readers would be apt to think that, if the country of Mexico were inhabited by the Anglo-Saxon or rather the Anglo-American race, a very different idea would be revealed from what is at present to be obtained therefrom; that in fact, in such an event, its Anglo-American inhabitants would have impressed their own form and laws upon the country; that they would have metamorphosed it, and reconstructed it in their own image; and in giving it their form, as it were, have fixed upon it the impress of their own personality. and would have thereby communicated to it a portion of the worth which resides in themselves. In truth, the mind is almost startled and stand aghast at hearing very recently from our army in Mexico, that far from home as they are, in the heart of a hostile country, a few thousand surrounded by almost as many millions, and in the midst of the dangers and difficulties of actual war and deadly conflicts, they should yet hold meetings for the purpose of taking into *serious consideration* a project to construct a RAIL ROAD from Vera Cruz to the city of Mexico, a rout hitherto deemed by Mexicans as practicable only for mules. We cannot refrain from quoting here, as being very appropriate to the present subject, a beautiful idea of our author, which strangely enough stands in marked contrast and contradiction to the foregoing idea which we have just attempted to refute, but which is still more effectually refuted by Cousin himself in the following sentiment, which we commend both for its truthfulness and for the beautiful language in which it is expressed: "The primitive world is but a basis, a matter fitted for the labor of man; all the value which analysis can leave to it, is the possibility that man should make use of it. There is its noblest destiny; as it is the destiny of man, in his relations with the world, to assimilate that nature unto himself in the utmost possible degree, to metamorphose it, to deposit and exhibit there unceasingly more and more, the freedom ai intelligence with which he is gifted. Industry, it gives me pleasure to repeat, is the triumph of man over that nature the tendency of which was to overwhelm and destroy him, and which retreats before him and is changed in his hands; it is nothing less than the creation of a new world by man; it has no other limits than those of power and of thought; its end is the entire absorption of nature into humanity."

But enough of this. We will now proceed to another topic; a topic, however, growing out of the same *formula* of reason; that topic is *war*, and is one too which is peculiarly interesting at this moment to the American people. To this subject we will consecrate our next article.

INFLUENCE OF RAILROADS.

Hon. J. M. Niles, in his late address before the New Haven County Agricultural Society, makes the following judicious remarks in relation to the influence of railroads:

"It has been supposed by many, that the systems of railroads and canals, by bringing the products of the west into competition with those of the Atlantic States, would operate injuriously to the agricultural interests of the latter, and reduce the value of land. But on a full development of that system, the result will be otherwise. Were agriculture and commerce the only great interests of our country, this consequence might have followed. But manufactures, the other great interest, supply local markets for the farmer; and the railroad system is already exerting a powerful influence in establishing manufactures in the interior, at points remote from tide water; and thus creating local markets for those products of the farm which would not justify transportation to our commercial cities on the seaboard. Whilst railroads bring the great staples of the west into competition with those of the Atlantic States, they enable the latter to send to market, at a good profit, a great variety of products, which could not otherwise be done, and which will not bear transporting from the western States. And this system, by its influence in evolving the various resources of the country, and increasing its wealth, exerts a favorable influence on agriculture generally, and more especially on sections contiguous to our commercial towns and manufacturing districts. Whilst it brings the flour and provisions of the west into the market on the seaboard, it enables the farmers in the Atlantic States to avail themselves of the markets, where local ones do not exist, for hay, milk, vegetables, fruit, and various articles, which, were it not for those facilities, would bear transportation a few miles only."

ART. 4.—THE WEST INDIA ISLANDS.

GEOGRAPHICAL AND POLITICAL IMPORTANCE OF THE WEST INDIES; SPANISH ISLANDS—CUBA AND PORTO RICO, HAVANA, MATANZAS, &C.; TRADE, COMMERCE, POPULATION, RESOURCES, HISTORY, ETC., OF CUBA AND PORTO RICO; FRENCH ISLANDS—MARTINIQUE, GUADALOUPE, ST. MARTINS, MARIE GALANTE, DESIRADE LES SAINTES, THEIR RESOURCES AND COMMERCE; BRITISH WEST INDIES—ANTIGUA, BARBADOES, BURMUDA, ANGUILLA, DOMINICA, GRENADA, MONTSERRAT, NEVIS, ST. CHRISTOPHER, ST. LUCIA, ST. VINCENT, TOBAGO, TRINIDAD, TARTOLA, VIRGIN ISLES, JAMAICA, BAHAMA—ABOLITION OF SLAVERY, PRESENT CONDITION OF THE ISLANDS, &C.; DUTCH ISLANDS—ST. EUSTATIA, LOZA, ST. MARTIN, CURACOA; DANISH ISLANDS—ST. THOMAS, ST. CROIX, ST. JOHN; SWEDISH ISLAND—ST. BARTHOLOMEW; FREE ISLAND—HAYTI; &C., &C.

Reposing on the bosom of the Atlantic, in a line which stretches south-westwardly from the peninsula of Florida, through eighteen degrees of latitude and twenty-five of longitude, and forming, at various distances with the opposing shores of the continent, the basins of the Gulf of Mexico and Carribean Sea, are found those "isles of the sea," so known and famed as the "Western Indies."

Discovered by the earliest western navigators, and colonized by the leading European powers, these islands constitute, at the present day, what may be regarded the few remaining intermediate links between the civilization, government and laws of the old and new world. A love of adventure and an irrepressible thirst for gain, rather than hopes of refuge, competence and homes, were the motives which drove across the deep their restless colonists—and they have looked ever backward, with filial fondness, to the land of their fathers and of their childhood. The laws that governed them, the institutions they maintained, the protection awarded, came all to them from that quarter. It was but natural they should submit, and that few, if any, of those political changes and convulsions which have marked contiguous regions of America should interrupt the loyalty and repose of the islands.

Thus has been preserved in the West Indies, through all the vicissitudes of European and American policy, the close relationship of colony and mother country. Broken into fragments, around which, and between which, is heard the roar of the ocean—separated in religion and in languages, in education and prejudices—of limited population, and lassitude inherent to tropical suns—what other destiny could be reserved than such as despotism or oppression might vouchsafe, in its cunning systems of colonial empire?*

The extension southward, over all barriers and in the face of all opposition, within the past few years, of the arms, institutions and policy of the United States, has given rise to speculations in other countries as well as in our own, in regard to the ultimate fate of the islands, which sweep along our shores. The keenest jealousies are exhibited in many quarters.* An injudicious suggestion in our Congress was not calculated to inflame the resentment of Spain less than the similarly injudicious, but more absurd, one ventured in Parliament by Lord Geo. Bentinck.† It has not gone unheeded in our own country.

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* For other information upon West Indies, the reader will consult Commercial Review, Vol. I, 180, *182.* *Vol. IV*, 308, 549, etc.

The peace of the world will not be disturbed by any contests growing out of the possession, by European powers, of these remote dominions: while amity shall last, their relationships will remain inviolate. In the event, however, of a general war, many and great will be the changes immediately involved. The United States could not, from her position and connections, from considerations of preservation and safety, be a quiet spectator of these changes. Indeed, it may be questioned whether a justifiable cause for interference would not arise simultaneously with them. The least evidence of court and cabinet intrigues, in relation to the islands, it may be asserted confidently, would be met at once, and resisted. This is our declared policy.

The geographical position of the West Indies, midway between the republics of North and South America—their great fertility and productiveness, their important commercial character and facilities are all circumstances, taken together, well calculated to give them an interest in the eyes of the world, in any event. A desire for information concerning them has become very general, and seeks to be satisfied from every available source. We have, therefore, determined to bring together every thing that can be derived from the latest and most reliable authorities, and present, as near as may be, to our readers, a fair and impartial summary.

The West India Islands, with the exception of Hayti, a free republic, are all under the jurisdiction of European powers, and are thus classified:

WEST INDIA ISLANDS.

1. *Dependencies of Spain.*
Cuba,
Porto Rico.

2. *Dependencies of France.*‡
Martinique,
Gaudaloupe,
Part of St. Martins,
Marie Galante,
Desirade Les Saintes.

3. *Dependencies of England.*§
Antigua,
Barbadoes,
Burmuda,
Anguilla,
Dominica,
Grenada,
Montserrat,
Nevis,
St. Christopher,
St. Lucia,
St. Vincent,
Tobago,
Trinidad,
Tartola,
Virgin Isles,
Jamaica,
Bahama,
Grenadines.

4. *Dependencies of Holl'd.*
St. Eustatia,
Saba,
St. Martin,
Curacoa.

5. *Dependancies of Denm'k.*
St. Thomas,
St. Croix,
St. John.

6. *Dependency of Sweden.*
St. Bartholomew.

7. *Independent Island.*
Hayti.

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* In a private letter from Madrid we are informed, that when application w made by Louisiana to search the Spanish archives for records of her early history report got wind, even in high places, that the object was to vamp up a *title to C as part of Louisiana!* Fancy the absurd consternation.

† To seize upon Cuba in satisfaction of the debt due by Spain—to liberate t slaves—to fortify the island as commanding the Gulf of Mexico and Missis valley.

‡ French Guayana and Cayenne will be considered with the French Ameri possessions hereafter.

§ British Guayana and Honduras are generally classed from their vicinity wi the West India possessions. We shall consider them in another place.

AREA AND POPULATION ISLANDS, 1838.*

Area sqr.miles English.		Whites and European Creoles.	Indians and free col'd.	Slaves.	Total Pop.
Spanish,	58.226	400.000	80.000	540.000	1.020.000
French,	125.112	95.000	———	184.856	280.000
British,	———	———	———	———	889.459
Dutch,	10.666	58.800	7.000	72.200	85.000
Danish,	170	6.000	3.000	38.000	46.000
Swedish,	43	1.992	560	5.428	8.000
Hayti,	28.302	28.000	———		935.000

1. Dependencies of Spain.—This early maritime power exercised for a long period the empire of the seas, and sought in colonial possessions all over the world, that state and magnificence which little at home could give. Her navigators first descried American soil, and coveted the wealth it was deemed to embody. The history of Spanish progression in the western seas has been marked by rapacity, extortion and blood.

Cuba was reached by Columbus in October, 1492, and retains the name by which it was called by the aborigines, though other titles have been, at different periods, assigned it: as Juana, Ferdinandina, Santiago, Ave Maria, etc. Its shortest distance from the United States is one hundred and thirty miles—viz: from Point Jacobs to Cape Tancha, on the Florida coast. The curvilinear length of the island is eight hundred miles, and the breadth varies from twenty-five to one hundred and thirty miles. In soil the island is fertile, except where the limestone is found above the surface. The forests are vast, and mahogany and other valuable woods are native. There are abundant mines of copper and coal, but none of the precious metals. Asphaltum, marble, and jasper are found. Sugar, coffee, and tobacco are the chief agricultural products, and their cultivation has progressed amazingly since the trade of the island was made free, in 1809. Population, in 1775, 170.370; 1791, 272.140; 1817, 551,998; 1827, 704.487; 1841, whites 418.291, slaves 436.495, free negroes and colored, 152,838; total population, 1.007.624. We have no later returns, although from the extraordinary prosperity of the island, and rapid progress of the slave trade, a very large increase of population might be fairly supposed in seven years.

The export of sugar in 1760, was stated at 5.000.000lbs.; in 1800, it reached 40.000.000; 1820, 100.000.000; 1837, Custom House returns, to which one-fourth for smuggling is added, 283.126.695lbs. The number of coffee plantations has increased from eighty, in 1800, to seven hundred and seventy-nine in 1817, two thousand and sixty-seven in 1827, etc. The tobacco culture has steadily increased. In 1826, the export of cigars was 197,000lbs, which, in 1837, reached 792.438 lbs. Indigo and cotton have declined. From the abundance of cattle, hides have become an important article of export. We proceed to furnish later tables and returns of agriculture and commerce.

The following table exhibits the commerce of Cuba with all nations, for sixteen years. 1223 M'Culloch.

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* There are no later returns, and it may be assumed that these fall short of the reality now, in some points.

COMMERCE OF CUBA WITH ALL NATIONS.

	Imports.						Exports.					
Years.	National Commerce.	In National vessels.	U. States.	England.	S. American Ports.	France.	National Commerce.	In National vessels.	U. States.	England.	Sp. Am. Ports.	France.
	$	$	$	$	$	$	$	$	$	$	$	$
1826	2.858.793	314.683	5.632.808	1.323.627		1.169.451	1.992.689	185.879	3.894.597	1.583.474		1.162.218
1827	2.541.322	349.728	7.162.695	1.618.371		1.472.204	2.284.250	184.059	4.107.449	1.605.073		1.043.618
1828	4.523.302	431.553	6.599.096	1.770.085		1.635.855	1.556.224	747.479	3.176.964	1.611.820		754.812
1829	4.961.043	844.826	5.734.765	1.837.775		1.254.947	2.292.580	562.653	3.191.535	1.729.404		909.808
1830	4.739.776	1.051.538	4.791.544	1.745.388		721.648	3.740.737	543.267	4 286.782	1.233.594		757.736
1831	4.121.829	1.825.890	4.690.308	1.465.983		669.604	2.193.761	723.338	3.921.592	1.567.720		441.085
1832	3.576.707	3.178.596	3.542.936	1.257.964		805.823	2.173.567	993.404	3.108,460	2.110.686	16.678	360.899
1833	3.185.781	4.777.580	4.461.472	1.625.173	1.371.786	927.491	1.854.714	1.274.440	4.386.885	910.918	16.214	531.321
1834	3.412.487	4.970.013	3.690.101	1.676.918	1.747.224	906.414	2.074.502	1.401.568	3.824.724	2.081.387	10.275	667.431
1835	3.508.349	5.200.955	5.409.919	1.689.465	2.084.552	904.140	1.801.092	1.114.695	4.365.569	1.754.676	36.185	603.985
1836	4 470.725	5.680.070	6.553.281	1.522.429	1.579.588	817.445	2.348.453	917.733	5.513.924	1.700.115	248.328	489.654
1837	4.559.153	4.966.191	6.548.557	1.373.964	1.099.367	861.360	2.919.474	1.294.282	5.792.623	2.990.466	30.562	1.344.608
1838	4.460.987	6.163.152	6.202.002	1.439.300	1.713.650	816.954	2.692.159	1.532.840	5.574.591	3.083.328	70.985	771.574
1839	5.320.515	7.108.704	6.132.794	1.770.499	1.467.125	714.664	2.719.792	1.951.785	5.528.045	5.141.098	37.219	845.906
1840	5.295.261	6.684.718	5.654.125	1.439.199	915.541	618.461	3.473.630	2.044.441	5.660.739	6.749.438		908.605
1842	5.557.351		6.200.221	3.110.698	2.487.894	1.476.752	3.729.970		5.282.594	9.259.606	301.562	1.617.712

	IMPORTS.					EXPORTS.				
Years.	Hanse, Towns, &c.	Baltic.	Italy and Portugal.	Warehouse.	Total.	Hanse, Towns, &c.	Baltic.	Italy and Portugal.	Warehouse.	Total.
	$	$	$	$	$	$	$	$	$	$
1826	1.631.125	16.849	218.794	1.759.621	14.925.754	2.998.154	487.223	200.761	1.312.839	13.809.838
1827	1.640.011	192.826	309.047	2.066.646	17.352.854	2.651.083	487.288	439.402	1.483.966	14.286.192
1828	2.082.906	176.027	282.584	2.033.507	19.534.922	2.809.229	783.521	237.289	1.473.020	13.114.362
1829	1.346.775	87.886	115.293	2.521.442	18.695.856	2.406.813	904.920	303.540	1.653.247	13.952.405
1830	1.701.358	81.958	102.116	1.236.283	16.171.562	2.448.290	1.035.268	334.137	1.521.144	15.870.968
1831	1.808.899	20.632	50.582	895.061	15.548.791	2.188.299	544.839	443.466	890.644	12.918.711
1832	1.918.197	33.843	87.884	796.511	15.198.465	2.590.813	1.135.525	393.574	737.009	13.595.117
1833	1.145.967	90.931	96.754	828.193	18.511.132	1.771.381	1.137.774	250.511	815.813	13.996.100
1834	8.555.363	19.215	151.151	1.134.407	18.563.300	2.289.782	1.081.284	101.443	956.615	14.487.955
1835	619.211	55.687	145.443	1.107.345	20.722.072	2.076.001	994.771	158.926	1.179.252	14.059.246
1836	766.959	59.068	92.628	1.009.771	22.551.969	1.934.935	1.029.570	264.730	1.132.942	15.398.245
1837	565.048	28.341	95.450	2.639.521	22.940.357	2.713.586	644.018	523.106	1.875.918	20.346.407
1838	916.498	79.193	64.593	2.873.545	24.729.878	2.698.163	1.646.953	366.643	1.674.287	20.471.102
1839	552.078	124.405	36.099	2.087.911	25.217.796	2.054.088	266.401	424.905	2.478.848	21.481.848
1840	1.010.291	47.914	29.492	3.357.172	24.700.189	2.835.620	924.398	319.941	2.987.745	25.941.783
1842	3.402.395	188.354	191.464	2.021.394	24.637.527	3.588.917	770.667	326.652	1.807.536	26.684.701

The imports of specie from 1839 to 1842, ranged from $781,631 to $2,207,178, and the exports from $1,000,000 to $1,700,000, during the same time. Of the whole import in 1842, $9,239,089 were in foreign, and $15,398,430 in Spanish vessels. Of the exports, however, $20,611,789 were in the ships of foreign powers, and but $6,072,813 in those of the mother country or the island.

ARTICLES OF IMPORT.

	1839.	1840.	1841.	1842
Liquors,.................	2.309.558	1.999.958	2.429.910	2.302.701
Provisions,..............	1.885.402	1.836.254	2.180.373	2.093.711
Spices,..................	119.224	114.332	60.274	45.384
Fruits,..................	226.234	229.306	227.569	263.757
Breadstuffs,.............	3.444.850	3.751.568	4.012.498	3.506.383
Linens,..................	2.634.286	2.445.255	1.943.880	3.043.220
Shoes and Leather,.......	651.256	524.934	384.687	385.894
Lumber,..................	1.292.777	1.331.053	1.379.158	1.319.343
Oils,....................	1.015.728	1.105.741	1.443.180	1.449.750
Fish,....................	398.711	439.739	431.096	448.475
Miscellaneous,...........	292.296	296.727	290.789	346.334
Woolens,.................	281.065	357.842	195.246	275.956
Cotton manufactures,.....	3.086.707	4.132.722	1.875.065	1.749.321
Silks,...................	484 062	432.551	304.302	386.064
Metals,..................	2.806.697	1.701.852	1.173.995	1.497.392
Miscellanies,............	4.196.306	4.191.105	3.183.025	3.834.958
In Warehouse,............			3.299.483	2.021.384

The following from the *Diario de la Marina*, exhibits the export of a few principal articles from Cuba, from 1840 to 1846. We have been unable to obtain later returns that are reliable.

EXPORT CUBA—1841-46.

		1841.	1842.	1843.	1844.	1845.
Sugar, cases,		829.556	817.643	889.103	1.009.565	475.286
Tobacco, unmanuf'd,	value	$719.369	742.854	901.030	585.156	834.621
" manufact'd	"	$1.677.743	1.454.269	2.566.250	1.564.250	1.261.300
Mahogany,	"	66.261	56.161	108.370	166.909	212.480
Cedar,		21.071	40.101	43.947	44.046	65.218
Copper,		4.505.490	4.981.405	2.013.534	2.003.587	2.199.202

VALUE IMPORTS AND EXPORTS CUBA—1840-44.

	Imports.	*Exports.*	*Difference.*
1840	$24.700.189	25.941.783	1.214.594
1841	25.081.408	26.774.614	1.693.206
1842	24.637.527	26.684.701	2.047.174
1843	23.422.096	25.029.792	1.607.696
1844	25.056.231	25.426.591	370.360

Of the imports for 1844, $5.726.271,50 were the products of Spain. brought in Spanish bottoms, except the insignificant amount of $26.972. Of the foreign imports into Cuba the same year, $6.436.735 were in Spanish bottoms. The *Balanza Mercantile* finds occasion of complaint in relation to foreign shipping, that the trade in Spanish vessels is, in place of increasing, as was hoped for, yearly on the decline. We shall see directly, the commercial, or navigation system, which prevails.

AMERICAN TRADE WITH CUBA.

Years.	*Imports from U. S.*	*Exports to U. S.*	*Difference.*
1842	$6.200.221	5.282.574	917.647
1843	5.938.073	5.224.068	714.005
1844	7.598.661	6.532.292	1.066.369

history of the Spanish colonies, either continental or island, ; the same pictures of wrong and oppression. They have been d, in every period of their existence, by the home government, led to no other rights or privileges than such as might be tol- y an avaricious despotism. The colonial code asserted the nstrous principles, whose execution was a warfare against hu- itself. Rapacity and extortion were familiar to the rulers, and lge them to the best purpose and with impunity, the darling f every measure. The crimes which have thus been committed, s by their atrocity, and paved the way for those South Amer- l Mexican revolutions, which resulted so happily in indepen- With all her greediness of wealth, however, what has been gress of Spain, and how miserable and abject is her condition

ive some idea of this colonial system, we would remark, that le property was considered as vested in the crown of Spain. a capital offense to carry on trade with foreigners, and even the t colonies were forbidden any intercourse. They were not per- to cultivate certain articles, and the crown reserved the mo- of others. No other than a native of Spain could fill an office t or honor, under the state. Intolerance and bigotry in religion aintained, and knowledge itself proscribed as dangerous.

West India Islands, from their extraordinary fertility, experi- less of the ills of these restrictions, at all times; but latterly, ease of smuggling operations and the impossibility of the colo- cing supplied by the mother country with articles of consump- well as the progress of more liberal principles, have induced nportant modifications in the commercial system of the islands. er, as will be seen directly, a thousand abuses are still suffered ain.

TARIFF OF DUTIES ADOPTED MARCH 1, 1846.

	Valuation.	Rate of Duty per ct.		Valuation.	Rate of Duty per ct.
k..........arroba.	$1 50	33½	Cordage, tarred......qtl.	12 —	33½
tles.......dozen.	3 —	33½	Cordage, Manilla.....qtl.	7 50	33½
.............bbl.	3 —	27½	Cotton..............qtl.	10 —	27½
empty.....each.	— 50	27½	Cider........bottles, doz.	3 —	33½
.............bbl.	9 —	33½	Flour, bbl., fixed duty....	— —	$9 50
ked......arroba.	1 75	27½	Hams...............qtl.	10 —	33½
ioked.........qtl.	7 —	33½	Hay................qtl.	— 50	27½
..........arroba.	— 75	33½	Herring..bxs. of 100 fish.	— 62	33½
k........arroba.	1 50	32½	Hogsheads, casks...each.	2 —	27½
.....bottles, doz.	3 —	33½	Hoops...............M.	30 —	27½
.......box, 4 lb.	— 75	33½	Horses, geldings....each.	150 —	33½
white and yellow			Lard................qtl.	12 —	33½
...........M. ft.	20 —	27½	Mackerel...........bbl.	3 —	27½
.............M.	12 —	32½	Nails, copper........qtl.	25 —	27½
.............qtl.	14 —	27½	Nails, iron...........qtl.	7 —	27½
tallow.......qtl.	12 —	33½	Oars.............100 ft.	6 25	27½
sperm........qtl.	32 —	27½	Oil, sperm and whale..qtl.	10 —	27½
American....qtl.	10 —	27½	Onions..............qtl.	1 50	33½
............ton.	3 75	32½	Paper, letter.......ream.	2 50	33½
araccas......qtl.	16 —	27½	Paper, wrapping....ream.	— 50	33½
ll other......qtl.	6 —	27½	Pork...............bbl.	14 —	33½
............qtl.	3 50	27½	Pork, sides..........qtl.	9 —	27½

Potatoes	bbl.	2 50	27½
Rice	qtl.	6 —	33½
Scantling	M. ft.	18 —	27½
Shingles	M.	3 75	27½
Shooks, sugar box	each.	— 75	27½
Shooks, hhd.	each.	1 —	27½
Soap, bar	qtl.	8 —	33½
Staves	M.	25 —	27½
Tallow	qtl.	7 50	27½
Tar	bbl.	3 —	27½
Tongues, smoked	qtl.	7 —	27½

EXPORT DUTIES.

Coffee	qtl.	20
Rum	pipe.	Free
Molasses	hhds.	Free
Honey	hhd.	$1 37
Sugar	box.	37
Cigars	M.	50
Tobacco	qtl.	1 50

This Tariff took effect on the 1st of March 1846, and on same date the tonnage duty was re-imposed upon vessels loading molasses.

In calculating the duty on imports, 1 per cent. on the amount of duty must be added, called *balanza*.

This is the latest tariff. The valuations are fixed, which of course take away the main characteristic of an *ad valorem* tariff. Discriminations in favor of Spanish-shipping are still rigidly observed. Thus, according to McGreggor, foreign produce and manufactures in Spanish bottoms, from a foreign port, pay 17¼ and 21¼, and Spanish produce and manufactures in foreign bottoms, from a Spanish port, pay the same, and foreign produce and manufactures in Spanish bottoms, direct from the peninsula, pay 13¾ and 16¾. Spanish produce and manufactures, in Spanish bottoms (except flour), direct from the peninsula, pay 6¼ per cent. on the valuation in the tariff; but after having touched at any foreign port, they pay duty as if shipped from that port. The rates of duty here given, were before the adoption of the tariff of 1846.

The export duties are, upon foreign flags, 6¼ per cent. upon the valuation of tariff. Spanish flag, for a foreign port, 4½ per cent.; Spanish flag, for a Spanish port, 2¼ per cent., except loaf sugar and clayed sugar, the latter of which pays 1.6 per 100lbs., in foreign bottoms.

From the circular of Messrs. Tyng & Co., Havana, 1847, we glean some interesting particulars regarding the Cuban trade. Vessels must have a clean bill of health from the Spanish consul, at the place of departure, or stand quarantine. Passports are delivered to the Governor's adjutant by all passengers, and manifest of cargo, &c., to Custom House officer. The correspondence is taken by the Post officer. Wharfage on goods, &c., unless the contrary is stipulated, is paid by the ship. Vessels loaded with molasses, pay no tonnage duties. The rates of commission on purchases at Havana, are 2½ per cent. Sales, 5 per cent. Guarantee, 2½; indorsing and negotiating bills on Europe, 2½; on United States, 1½; collecting freight, 2½; procuring freight, 5; disbursements, 2½ per cent.

Sugar is brought to market till July, but mostly in March, April and May. It is "clayed" or "Muscovado"—but mostly clayed. The clayed is in boxes, and the Muscovado in casks. The production of *Coffee* has greatly decreased. It begins ripening in August, is picked till January, and brought to market mostly in that and the preceding and following month. Is packed on plantations, and sold by brokers. The export of *Molasses* is chiefly to the United States. It is carted from estates to shipping points, the earliest being in December. The valuation is by the keg of 5½ gallons, and the wooden cask is valued at 5½ cents a gallon. *Honey* is exported largely, but is full of impurities. *Tafia*, or Spanish brandy, made from the refuse of sugar houses, is sold by the pipe. *Tobacco* is divided into two classes, according to the of production, whether east or west of Havana. That from the s very inferior. The Calidad is the best tobacco. The secundas, ferior class of wrappers, &c. The crop appears in market in July. is shipped in cakes, fifteen inches wide, thirty long, and three . The regalia *Cigars* are manufactured from the libra, or Calidad co. Those for the English market are put up in large cedar of from fifteen to thirty thousand.

ere are twelve ports in Cuba, at which export and import duties ollected. The value of the trade of these, and amount of duties, iven below.

TRADE OF THE SPANISH WEST INDIA PORTS, 1842.

	Imports.	*Duties.*	*Exports.*	*Duties.*
ia, ...	$18.801.913	4.449.215	13.118.585	710.613
....	2.382.938	531.673	6.784.765	153.096
tas, ...	171.383	65.116	205.116	9.967
izas, ...	1.801.558	525.352	4.365.926	328.078
lad, ...	828.185	215.145	1.129.501	91.152
oa, ...	87.490	18.741	85.233	2.932
i, ...	172.084	33.189	248.763	19.089
igos, ...	195.935	78.603	509.806	35.478
anillo, ...	117.031	48.041	170.984	12.981
Espiritu, ...	14.906	7.158	23.488	2.140
Cruz, ...	44.589	21.517	34.322	4.981
ian, ...	19.519	6.877	8.208	1.203
	24.637.430	6.005.627	26.684.697	1.371.710

e furnish a list of the articles of domestic export the same year. e were also exported $138.349 foreign goods, and $1.807.536 from iouse.

DOMESTIC EXPORTS CUBA, 1842.

gany, ..	$ 56.161	Hides	21.130	Tobacco, ...	1.461.760
from cane,	204.550	Sweetmeats, ...	7.091	Other articles,.	200.289
, ...	32	Fruits, ...	49.298	Quicksilver, ..	*
i, ...	75.834	Honey, ...	71.325	Indigo, ...	†
, ...	2.998.269	Molasses, ...	744.608	Cochineal, ...	‡
......	11.447.009	Horses and Mules,	1.205	Coined Gold, ..	154.055
......	40.101	Fustic, ...		Coined Silver, .	1.136.605
....	290.828	Cattle, ...		Other metals, .	46.903
r ore, ..	4.981.405	Cigars, ...	749.812		

e manufactured goods imported were from the following coun-

IMPORTS MANUFACTURED GOODS INTO CUBA, 1842.

untries.	*Cottons.*	*Woolens*	*Linens.*	*Silks*	*Leather.*	*Lumber & Provisions.*
....	$ 35.621	1.452	14.073	67.442	119.113	2.870.287
l States,..	80.905	13.217	158.466	60.361	8.620	3.104.915
e, ...	245.046	18.434	665.634	102.943	52.039	184.293
nd, ...	631.944	171.481	464.687	44.152	20	215.373
id, ...	4.008		1.789			142.350
im, ...	46.171	14.725	74.320	24.947	38.414	25.461
any, ...	282.151	43.118	1.695.643	19.010	4.177	154.083
ouse, ...	178.117	5.611	158.542	13.491	768	16.970
places, ..	1.552	5.100	383	1.101	60.488	1.106.077
al, ...	1.505.515	273.138	3.233.537	342.447	283.639	7.819.839

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i 1830, $9.900. † In 1810, $210.344. ‡ In 1839, $254.300.

Taxation in Cuba is prodigious, a half million of whites paying $12,000,000, to be expended mostly abroad. Foreigners are strictly watched. They must buy passports, and give security for good conduct. Their baggage is subjected to search. They must have additional passports for traveling in the island, or for leaving, to gratify avaricious officials. In a thousand annoying ways, these absurd jealousies and prejudices are exhibited, to the manifest detriment of the island.

The interior is, to some extent, now opened by railroads, constructed by English and Americans, of which there are some eight hundred miles. It is marked by many natural beauties, and exhibits high prosperity. The following, from Dr. Wurdeman's Notes, will be interesting:

A Coffee Estate.

"The cherries ripen from August to December, and are all gathered singly by the hand; and as three or four different crops are all ripening at the same time, on each tree, as many separate pickings are required. Brought in baskets from the fields, they are daily exposed to the sun, on the secaderos, but on each night raked together in heaps, and covered by tents of rice straw, to protect them from the heavy dews. After three weeks they become quite dried, and are then fit for the mill. The secaderos often cover a large surface of the batey, or yard; an estate of four hundred thousand trees having twenty-five, each sixty feet long and fifty feet wide. They are made of stones, plastered smoothly over with cement, with raised edges, through which openings, guarded by comb-like gates, permit the rain water to escape, and stop the berries. Sometimes, between the secaderos, plastered gutters are constructed, to convey the water into a general reservoir; which is very useful in a country where every pailfull of that necessary fluid has often to be raised from a well two or three hundred feet deep.

The storehouse is generally about one hundred feet long, fifty feet wide, and twenty feet high, to the eaves of a high pitched-roof. Within this large building is also the coffee mill, consisting of a large circular wooden trough, two feet deep, and in width tapering from two feet at the top to one at the bottom. A heavy, solid, wooden wheel plays in it, about six feet in diameter, and eight inches in thickness at its circumference, increasing to two feet at its center. The berries are thus permitted to roll between it and the sides of the trough, which is kept well supplied to prevent their being crushed by the wheel, which cleanses them chiefly by pressing them forcibly against each other. The shaft is fixed at one extremity by a ring to a central post, and, to the other, the ox or horse is attached. The dried cherries, conveyed through a funnel from the store room above, fall into the central space, whence they are thrown into the trough, from which also those already crushed are withdrawn, and sent into the cleansing room. Here they are put into a fanning mill, which not only separates the husks from the berries, but also divides the latter into two sizes, the larger rolling over a wire sieve into another room, while the smaller grains, with the pebbles, fall through it on the floor. The latter are then spread in heaps on long tables, around which the negroes are seated, and the broken and distorted grains are separated and set apart for the use of the planter. For this very quality, rejected by us, and called triage, consists chiefly of the round small grains produced by old trees, and possesses the finest flavor. It is kept from year to year, and when old, is equal to the best Mocha coffee.

It is now fit for market, and is packed in bags of Manilla hemp, the only material that can resist the force, produced by the swelling of the grain, from the absorption of the atmospheric moisture. Some pass the coffee a second time through the mill, which polishes it. A few, before submitting it to this process, mingle it with husks that have been parched by fire, thus painting each grain a dark green; but this deception is readily detected by rubbing them on a white handkerchief. The grinding continues through December, and, by the end of January, the whole crop is generally sent to market."

White Havana Sugar.

"To make the white Havana quality, it is removed from the trough into earthen or tin conical pans, each capable of holding about eighty pounds of the same, ng at their apices, openings closed with a few dried cane leaves, through which olasses percolates and falls into the gutters below. Clay, made into a soft e, by being well mixed with water, is next spread over the sugar about three es thick. The water, separating slowly from it, passes through the brown sugar w, and washes off the molasses from each grain, converting it into the quality wn as Havana white. After a certain time, the mass becomes consolidated, l the loaf is removed from the pan, and carried to the driers—large wooden es fixed on railways—on which they can be readily rolled under cover of the d, when it rains. The base of the conical loaf is the whitest, while the apex is dirty brown hue, and the intervening portions of a light brown. It is divided these three kinds by the negroes, who, with their cleavers, walk over the sugar their bare feet, cutting the masses into small lumps. To a stranger, the sight wo or three dozen half-naked negroes, thus employed, under a broiling sun, sweating over their task, is far from being pleasant. A machine has, however, lately invented for crushing the loaves, and the present unclean method will ably be generally abandoned."

COST AND EXPENSE OF SUGAR PLANTATION.

cavallerias (1767 acres),	@ 250	$13.250	—tribute	@ 5 per cent.	$662
negroes,	450	45.000	"	@ 12	5.400
oxen,	50	2.500	"	@ 12	300
steam engine, and two trains boilers,		15.000	"	@ 12	1.800
urging, and storehouse, etc.,		30.000	"	@ 12	3.600
		$105.750			
1 Engineer for 6 months,		$600			
1 Mayordomo, 12 "		360			
1 Mayoral, 12 "		600			
1 ox driver, 12 "		360			
1 negro carpenter and three coopers,		780			
1 white carpenter, twelve months,		720			
1 sugar master, 800 hhds., @ $1,		800			
Physician, each negro per an. @ $2,		200			
Clothing and food for slaves, @ $10,		1.000			
Incidental expenses,		5.000			10,420
Annual expense,					$22.182
Proceeds plantation, 800 hhds. sugar, Muscovado, @ 50,				$40.000	
400 " molasses, @ $5,				2.000	
Annual proceeds,				$42.000	

Havana.—This is the most important commercial city in the West dies, and, until the relaxation of Spanish colonial policy, engrossed rly the whole foreign trade of Cuba. Its population and prosperity ve increased with great rapidity. In 1791, the former was 44.357; 1810, 96.304; in 1827, 94.023; in 1845, according to Dr. Wurden, the city and suburbs, including prisoners and transient persons, l not fall short of 184.508 individuals; 48.860 only, being within walls. The resident foreigners were 18.977; 15.986 being from ain and the Canaries, 623 from France, 327 from England, 153 from ly, 309 from the rest of Europe. There were also 81 from Porto co and the Phillippines, 670 from Mexico, Columbia, and Peru, 160 m St. Domingo, 668 from North America. At the present time. s population cannot be less than 200.000.

The streets of Havana are few and narrow, but straight, and cross- each other at right angles. Being without sidewalks, and in the siness season crowded, they are difficult of passage. The houses ar constructed of stout masonry, and are very substantial. The value of lots is exhorbitant, and rents are in a similar ratio. Many of the private residences are costly and magnificent structures. Dr. Wurdeman remarks:

> "I was shown one belonging to one of the Gomez, that cost five hundred thousand dollars; and without the wall, facing the military parade ground, another was nearly built which, with its pillars and arches, occupied a front as large as some of the minor palaces in Europe. The value of real estate is very high in Havana; a lot of 60 feet square, on which a store was afterwards built, sold a few years ago, for $40.000, and the hotel of my host, that can accommodate from thirty boarders comfortably, to sixty, packed away, as they often are here, commands a rent of six thousand dollars. With such a value set on the land, but little is appropriated to yards, and the whole city may be said to be divided into squares of solid blocks.
>
> "Every window, accessible either from the street or the roofs of neighboring houses, is strongly barricaded with iron bars, while the stout folding doors guarding the only entrance to the whole building, would not be unfit to protect that of a fortress. They are castellated palaces; and with their terraced roofs, their galleries and passages, their barricaded windows and ponderous doors, remind one of the olden Saxon strong holds, which Scott has so graphically described.
>
> "There is no West End in Havana; the stately mansion of the millionaire is often in juxtaposition with the magazine of the tasajo; jerked beef, with its sign of a large slice swinging over its door, and its putrid-like odors tainting the air; or its basement, occupied by the tienda, with its stock of lard, garlic and groceries; or the work shops of the humble artizans. Many of the dwellings are, however, only of one story, and their parlors are completely exposed to the gaze of every one, through their large windows which open on the street. Two rows of arm chairs, facing each other, are placed near these, where, during the evening, the older members of the family may be seen seated with their visitors. The younger ones stand within the windows, looking through the interstices of the iron bars, at the pedestrians, and occasionally enjoying the conversation of an acquaintance, as he loiters for a moment to pay a passing compliment."

The suppression of the Monastic Orders in Cuba, and confiscation of their immense possessions, are sufficiently known. But few of the monks are now to be found in the city. The tithes, however, are still collected, but no permission for the erection of a Protestant church can be obtained.

Havana was originally established on the south coast of Cuba, near Batabano, but was removed in 1519, to the present site, on account of the insalubrity of the other. The Governors now reside in the city, though formerly St. Jago de Cuba was selected by them. A French corsair reduced the town to ruins in 1538. In 1655 the English, in an attempt upon Havana, were repulsed with great loss. In 1762 they captured it with sea and land forces, reducing the Moro Castle. This expedition was under the Earl of Albemarle, and consisted of 53 vessels of 2,268 guns and 14,000 soldiers, 2,000 being from New England, Virginia and Jamaica. The Spaniards had 27,000 men, 1,200 guns, and 12 mortars. The resistance was terrible. At the peace of 1763, the city was restored to Spain.

The harbor of Havana is magnificent, and capable of accommodating with safety 1,000 ships. The entrance between the Moro and Punta castles, is 1500 yards long, and, at the narrowest, 350 wide. Depth of water at entrance, 8 fathoms. The wharves are not extensive, the ships lying with stems or sterns to the shore. From the Calanas the view is magnificent.

> "Far down lies a forest of masts, the tops of which are hardly on a level with the base of the fortress; and just beyond is the populous city, with its solid blocks

of turreted houses, occupying every space of the level land, and creeping half way up its surrounding hills. Carry your eyes southward, and trace the shores of the little bay, everywhere studded with villas, its bosom covered by the large fleet of vessels from every nation, riding securely at anchor; and the summits of the adjacent heights, crowned by the forts, protecting, while perfectly commanding, the city—presenting, in their sullen grandeur, a strong contrast with the peaceful look of the latter. How dwindled to pigmies are the moving throngs below; yet how the sound of their mingled voices sweeps upward. Even here, you can distinguish almost the words spoken. And that sudden burst of music from those numerous convent bells, playing their merry tunes as if to arouse the buried monks once more to life's joys. Now they cease, and now again they all strike up a din that would start a fireman from the sleep of death."

Discriminating duties are levied at Havana, for the support of the dredging machine, wharf dues, light house fees, health officer's fees, custom house fees, &c. The duties on some articles, where the amount is over $1.000, are payable at stated periods, and the credits, which are sometimes very long, have never yet resulted in loss to the government. Should the consignee's promissory note for the amount not be met, he must ever afterwards pay cash duties. The Spanish coins, weights and measures are as follows:

SPANISH COINS, WEIGHTS AND MEASURES.

Coins.—One dollar=eight rials; one Spanish doubloon=seventeen dollars; one South American doubloon= sixteen dollars.

Weights.—One quintal one hundred pounds, or four arrobas of twenty-five pounds, one hundred one and a half pounds English, or forty-six killogrammes.

Measures.—One hundred vrs.= one hundred yards; one hundred and forty vrs.= one hundred French ells or aunes; eighty-one vrs.=one hundred Brab. ells; one hundred and eight vrs =one hundred and sixty Hamburg ells; one fanego= three bushels nearly, or two hundred pounds Spanish; one arroba of wine or spirits= four and one-tenth, one wine gallon, nearly.

The tariff of 1846, established at Cuba, is even more favorable for Spanish vessels than previous ones. The rates of duties, however, on many important articles, have been modified materially. The export duties have also been changed. Foreign vessels pay 23 per cent. additional tonnage duty, to bring them to the Spanish standard of measure. The health officer now receives twelve dollars for a vessel of 300 tons, or six if she be Spanish. The disbursements by a foreign ship master, on a vessel of 160 tons, in all the various charges, reach as high as $900 or $1000. So rigid and unprincipled is the system of exaction which prevails!

We make another extract from notes on Cuba, which is interesting:

"The Spaniards are chiefly the owners of the stores, the Creoles being seldom engaged in commerce. Those containing dry goods belong generally to Asturians, while the sale of groceries and provisions is monopolized by Catalans. These latter are an industrious, shrewd, economical class, and have, perhaps, in consequence of these qualities, received their *sobriquet* of Spanish Jews, which can only be construed into a compliment to the Israelite. A large portion of the commerce of the island is in their hands, as well as a very great part of the wealth. In the interior of the island, they appear to monopolize every branch of trading, from the pack of the humble peddler to the country tienda, with its varied contents, and in the maritime towns, many a commercial house, whose ships cover the sea, is theirs. The Catalan furnishes the planter with all the necessaries for his negroes and plantations; advances money for his crops, which he then sells on commission; and often loans to him the requisite sums to erect his costly sugar works, or make his less expensive coffee estate, but all at an interest ruinous in the present depreciated value of his crops."

EXPORTS OF PRODUCE FROM HAVANA FOR TWELVE YEARS.

YEARS.	SUGAR. boxes.	COFFEE. arrobas.	MOLASSES. hhds.	HONEY. tierces.	WAX. arrobas.	RUM. pipes.	CIGARS. M.	TOBACCO. pounds.
1834...	292.207	915.601	39.233	1.444	22.271	2.479	116.442	540.357
1835...	300.218	793.392	42.355	1.403	23.303	3.583	64.733	660.915
1836...	313.978	839.956	44.778	1.340	20.489	3.009	94.564	1.293.803
1837...	321.657	1.409.789	43.278	1.399	35.414	2.497	143.705	1.119.155
1838...	344.493	864.490	56.451	1.173	20.251	3.976	171.413	1.528.195
1839...	330.624	1.174.996	51.902	1.526	29.535	6.670	153.370	1.359.039
1840...	447.578	1.272.823	47.006	2.113	24.447	8.472	137.067	1.025.263
1841...	346.890	742.570	42.909	1.974	28.815	8.753	159.450	1.452.969
1842...	427.947	1.081.468	37.459	2.643	29.351	6.785	130.727	1.018.930
1843...	461.307	773.043	35.711	2.198	37.048	6.223	152.009	2.136.902
1844...	534.583	579.248	33.812	1.963	31.759	4.966	149.583	1.286.242
1845...	267.595	170.466	20.075	847	31.409	2.727	119.271	1.633.073

COMPARATIVE STATEMENT OF THE EXPORTS OF SUGAR, COFFEE, AND TOBACCO, FROM HAVANA, FOR THE FIRST SIX MONTHS OF 1846 AND 1847.

PORTS.	SUGAR. boxes.		COFFEE. arrobas.		TOBACCO. manufactured.		TOBACCO. leaf.	
	1846.	1847.	1846.	1847.	1846.	1847.	1846.	1847.
Spain,	74.969	50.466	21.598	23.087	4.654	17.652	474.314	144.403
United States,	52.960	110 532	36.633	68.323	23.483	15.044	407.152	163.191
England,	2.369	57.911	465	1.298	11.103	12.511	104.172	16.625
Cowes,	83.303	62.489	48	2.836	630	1.804	6.933	....
Baltic,	6.825	24.710	.....	2	1.356	181	....	......
Hamb. & Brem.,	41.954	30.586	5.944	21.286	5.801	9.971	877.021	249.408
Holland,	5.956	15.569	12	146	766	1.350	25.100	....
Belgium,	8.840	17.370	6	16	1.278	1.779	9.500	7.875
France,	15.973	13.437	13.944	97.764	19.981	19.583	50.872	131.000
Trieste & Venice,	8.464	8.796	14.821	47.830	360	5.513	......	1.103
Italy,	6.883	3.947	800	8.282	1.588	653	9.358	....
Other ports,	5.131	6.489	1.559	11.331	2.620	2.162	51.644	6.690
Total,	513.318	401.302	95.530	282.201	75.620	88.208	2.016.066	720.293

TONNAGE OF HAVANA, 1844—5.

1844.		*Tons.*	1845.		*Tons.*
American vessels arrived	866	161.395	Vessels	543	98.215
British	116	58.338		109	55.916
Spanish	526	79.978		575	88.523
Dutch	21	3.981		19	2.838
Belgian	15	4.054		13	3.017
French	25	5.772		21	4.550
Hamburgh	15	3.290		6	1.261
Bremen	27	5.027		20	3.679
Danish	23	4.731		10	1.605
Others	46	11.298		63	14.649
Total	1.680	332.964	Total	1.379	274.483

There are many learned institutions at Havana, among others, the Royal University, with medical and law schools, and chairs of natural science; a Royal Seminary for girls, a school of sculpture and painting, a free mercantile school, a museum of natural history, and many other institutions of public charity and benevolence; but with all, education is but sadly attended, and it becomes necessary to go abroad to seek it.

The Patriotic or Economical Society, addresses itself to the education, agriculture, commerce, popular industry, and history of Cuba. It

public library, and publishes monthly papers and reports of the
valuable character.
ere are thirteen printing offices in Havana, and twenty-six in Cuba;
e newspapers, which are sufficiently numerous, are under so severe
orship, that they can be of little value. The number of merchants,
10, was one hundred and forty, and their operations are conducted
ut a single bank, but bonds and obligations circulate freely.
tanzas is the second town of Cuba, and is distant fifty-two miles
Havana. We extract the following description of it:

e first lines of the city were traced in October, 1693, by Senor Manzaneda,
whose government it was founded. To the city itself, was given that of San
Alcazor de Matanzas—the last, that by which it is generally designated,
ing the slaughter of a battle field.
e back country of Matanzas is rich in sugar and coffee estates, and after it
ade a port of entry, it increased rapidly in trade and commerce. It now
s an arm across the San Juan river, into the adjacent Mangrove swamp,
an embryo city has sprung up, called the Pueblo Nuevo, and over the
ri, at the base of the Cumbre, another arm, named Versailles. Including
two suburbs, its population, in 1841, amounted to nineteen thousand one
ed and twenty-four, of whom ten thousand three hundred and four were
, three thousand and forty-one free colored, and five thousand seven hundred
venty-nine were slaves. The same year, four hundred and eighty vessels
d its port, of which three hundred and two were American, and five hundred
ty-eight sailed from it, paying to the government, in tonnage and other du-
arly a million of dollars. Its importations amounted to $1.995.311, of which
99 were for lumber from the United States, and its exportations to $4.374.780,
ch $3.733.879 were for sugar, $351.733 for molasses, and $163.385 for coffee.
e houses of Matanzas are mostly of stone, built, like those of Havana, in a
urable manner, with their windows as strongly barricaded with iron. But the
r constructed of wood, the English, one continually hears along the Bay street,
general cleanliness of the town, give it somewhat of a home air. It wants the
of Havana—nor has it as many sources of amusements; but to many, its
uiet forms an attraction, and the proximity of its beautiful passeo, from
a fine view of the whole bay is obtained, its purer air, and the romantic
y in its vicinity, induce many to prefer it as a residence."

EXPORTS FROM MATANZAS FOR 1847.

	SUGAR. bxs.	COFFEE. lbs.	MOLASSES. hhds.
ork	45.904	185.227½	4.934
	32.060½	82.450	8.375
ston and other Southern ports	7.550	117.475	5.648
elphia	28.405½	....	....
Island	3.073½	3.477½	5.114
nd and other Northern ports	1.108½	17.850	10.501
nd	68.085½	32.650	5.792
, I. W	50.009	5.050	31
tar	1.697	83.400	.....
h Provinces	5.009½	125.175	5.998
urg and Bremen	24.583	3.009.425	.....
altic	16.322	350	.....
d	7.403	150	2.500
m	14.285	....	1.026
	8.862	201.250	.....
	18.459	176.952½	96
	2.657	168.745	.....
driatic	27.390	150	.....
s Ports	761	32.800	.....
s	23.546	749.260	.....
al	387.171	3.405.777½	54.

The following will show the number of vessels, the amount of tonnage, and the nation to which belonging, employed in exporting the above:

	Ships & Barks.	*Brigs.*	*Schrs.*	*Poleacres.*	*Lugger.*	*Tons.*
American	79	165	71	..	..	59.057½
English	46	62	10	..	..	30.697½
Spanish	17	42	1	17	..	15.048½
French	4	..	..	..	..	1.287
German	19	15	..	..	..	11.530
Russian	2	2	..	..	..	1.210
Prussian	2	1	..	..	..	1.092
Swedish	3	3	..	..	..	2.410
Norwegian	1	2	..	..	..	756
Brazilian		2	..	..	1	850½
Total	173	294	82	17	1	153.939

Puerto Principe is the capital of the Central Department of Cuba. It is one hundred and fifty-one leagues from Havana, and has a population of 13.817 whites, and about 10,000 slaves and colored. Its importations in 1841 were $186.825, and exports $74.595.

Trinidad is ninety miles from Havana, on the south coast. Population, 5.877 whites, 4.474 free colored, 2.417 slaves. Imports, 1841, $942.661. Exports, $1.157.571. *Sancti Spiritus* contains 5.296 whites, 2.722 colored, 1.466 slaves. *Santiago de Cuba* is two hundred and thirty leagues from Havana, on the south coast. Population 24.753. Importations in 1841, $2.631.421. Exportations, $5.993.631. On the southern coast of Cuba there are twenty-eight harbors and road-steads.

As a citizen of New Orleans, we cannot leave the island of Cuba without remarking upon the interesting relations it sustains to ours, more than to any other American city. We are in more constant and immediate intercourse, and it appears but a part of our own South, unnaturally and arbitrarily separated. In the progress and prospects of Cuba, it is but natural we cherish a deep interest. Alas! the time has not yet come for her regeneration! Even the Englishman, M'Culloch, can say:

> "It is not easy to exaggerate the political importance of Cuba. Her size, geographical position, and the situation, great strength and admirable harbor of the Havana, render her, as it were, the mistress of the Gulf of Mexico. No wonder, therefore, that her possession and the nature of the government to which she is subjected, should be objects of intense interest to the United States, and also to Great Britain and other commercial nations. On the whole, it would seem to be most to the advantage of the commercial world, that Cuba should continue, as at present, dependent upon Spain, or that she should become independent. So long as she remains under Spain, there is but little risk of her natural capabilities being turned to the prejudice either of commerce in general, or of that of any particular state. But there is good reason to fear that it would be very much the reverse, were Cuba to come into the possession of the United States, or of any of the great European powers. Instead of ministering exclusively to the wants of a great and growing commerce, she might then be converted into an important military station, and be employed as a basis for warlike operations, that could not be carried on without great injury to the trade of the western world."

Slavery in Cuba, would appear a fixed institution, and no power has succeeded in arresting the progress of the slave trade with the coasts of Africa, which has steadily progressed, and is now in extraordinary prosperity. The demand for slave sugars, induced by their cheapness and the removal of duties abroad, enhances the value and the demand and supply of slaves. Many thousands are annually introduced. Dr.

rdeman tells us, that in 1843, two thousand Africans were congre-
ed in and near Havana, for sale. Thousands are sold on the coast
the plantations. The slave laws are liberal in many respects, and
government prescribes their rest, diet, clothing, allowances, &c.
ey are not to be worked over nine hours a day, except in the grinding
son, then sixteen hours. The slave may compel the master to sell
his freedom. The laws are not all, however, observed; though the
nstrous stories which have been propagated by British philanthro-
ts and praters, about the cruelty, oppression and tyranny exercised
the masters over the islands, are altogether malicious fabrications.
rdeman, who traveled through the island, speaks of the condition
the slave as equal to that of the operatives of Europe, and to that
the negroes in many of our southern states.

Porto Rico is an island of about one hundred miles length and an
rage breadth of thirty-nine miles. It was discovered by Columbus,
l the natives exterminated in 1509 by Spaniards from St. Domingo.
e present population is 500,000, of which 50,000 only are slaves,
l are governed by arbitrary Spanish laws. There are no manufac-
es, though gold, copper, iron, lead and coal are found in the island.
out one-fifteenth of the area is in cultivation—in sugar, coffee, plan-
ns, maize, rice, tobacco, cotton, etc. The seaports are San Juan,
000 inhabitants, and eleven others.

PORTS, EXPORTS AND DUTIES OF PORTO RICO, 1842 AND 1843.

	1842.	1843.
Imports	$5.757.403	$4.312.546
Exports	6.429.257	5.054.905
Duties	1.438.351	1.682.201

ARTICLES OF EXPORT, 1842 AND 1843.

		1842.		1843.
Rum	hhds.	2.097	hhds.	1.157
Cotton	lbs.	882.064	lbs.	350.553
Sugar	lbs.	91.906.688	lbs.	71.039.913
Hides	lbs.	567.052	lbs.	509.777
Coffee	lbs.	12.878.953	lbs.	7.756.335
Cattle	head.	3.548	head.	2.595
Molasses	gal.	3.037.725	gal.	2.280.115
Tobacco	lbs.	6.693.953	lbs.	1.453.145

ARTICLES OF IMPORT.

Liquids		$212.700
Salt Provisions		68.853
Other Provisions		106.856
Spices		7.989
Fruits		29.251
Grain		614.208
Soap, Tallow, &c		121.824
Fish		301.452
Cottons	365.781	862.483
Woolens	41.339	
Linens	296.789	
Silks	86.421	
Perfumery	72.155	
Woods		176.685
Gold and Silver Coin		192.957
Other articles		727.240

The great excess of free population in Porto Rico, and of Europeans, distinguish it from all the other islands. The healthfulness of the climate, and extraordinary fertility of the soil, is one leading cause of the distinction. Much of the cultivation is effected by the whites, and it is remarked by Flinter:

> "The necessaries and many of the luxuries of life, are enjoyed by the great majority of the inhabitants of Porto Rico. The Xivaros, a name applied to all the whites below the better classes, swing themselves to and fro in their hammocks all day long, smoking their cigars and scraping a guitar. A few coffee plants and plantain trees, a cow and a horse, an acre of land in corn or sweet potatoes, constitute the property of what would be denominated a comfortable Xivaro, who, mounted on his meagre and hard worked horse, with his long sword protruding from his basket, dressed in a broad brimmed straw hat, cotton jacket, clean shirt, and check pantaloons, sallies forth from his cabin to mass, to a cock fight, or to a dance, thinking himself the most happy and independent being in existence."

2. DEPENDENCIES OF FRANCE.—The American empire, which once existed in such vast proportions under the flag of France, has dwindled almost into insignificance. With the exception of the diminutive islands of St. Pierre, Miquelon and Langley, near the coast of Newfoundland, and the strip of land on the coast of South America, entitled Guiana,* she has only remaining a few unimportant possessions in the West Indies, which we shall proceed to notice at length.

It was said of the colonial empire of France, by Mr. Burke, that it approached the perfection of administrative wisdom—a position combatted by McGreggor, who thinks that but for the very errors of this administration, Hayti would still have been retained, the richest of all the islands. The colonies were placed under the superintendance of a Council of Commerce in Paris, who received a fixed compensation for their services, and were endowed with extraordinary powers in regard to every thing of commercial and industrial interest. Navigation and trade were restricted to France. The taxes were light, and no import duties were levied, and but nominal export. The colonial system became thus one of great oppression upon the home government, and could only be supported by excessive taxation. Even the benefit expected by the mother country, from exclusive trade, proved illusory on account of the perfidy of colonial officers and hardihood of smugglers.

The terrible struggles which the political barometer indicates, for many years to come in France, before that nation shall pass under a sound, liberal and constitutional government, give an interest to any inquiries concerning her. The declaration of her revolutionary government, that the emancipation of slavery in the West India colonies, will be one of the first measures of popular sovereignty, fearfully admonishes of the dangers of which the times are pregnant. We recur to Hayti, and the blood which the old revolution of France caused to be shed there, and the horrors of servile insurrection. Are these scenes again to be enacted? In any case, how will that magnificent island, now under its *free blacks*, compare with what it was under the institution of slavery; and where are those "British Isles," once such garden spots and sources of inexhaustible wealth, now that the recklessness of pseudo-philanthropy has released from labor, and thus practically enslaved *doubly* its operatives? But all of this we shall see fully anon.

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* *French Guiana* is on the South American coast, two hundred and fifty miles long, and from one hundred to one hundred and ninety broad. Population, in 1837, [illegible] of which 16.592 are slaves. The capital is built on a small island called Cayenne, off the coast. "The sugar cane was introduced by the earliest colonists, and its culture has been greatly extended since 1829. There are from thirty to forty large establishments for the manufacture of sugar, and in all about fifty sugar mills, twenty-seven of which were, in 1836, worked by steam. The cultivation of coffee has decreased. The value of export and import trade in 1836, chiefly with France, exceeded 6.000.000 francs. Some French adventurers first settled at Cayenne in 1604, and with only a few interruptions from the Dutch and English, the French held that station and the rest of the colony till 1809; it was then taken possession of by English and Portuguese, and held by the latter till 1815, when, in pursuance of the treaty of Paris, it was restored to France."

Guadaloupe embraces two islands, divided by Salt river, which is navigable for small vessels. These islands are entitled Grande Terre and Bassee Terre, and are about five hundred and thirty-four square miles each. The harbor of Le Petit cal de Sac is well sheltered. The town of Guadaloupe extends along the shore, is well built, and has a population of 7.500. *Marie Galante*, *Saintes*, *Desirada* and *St. Martin* (French port), are dependencies of Guadaloupe. The first is a small island of sixty square miles area, whose capital is Grandbourg, a neat village; the second consists of rocky cliffs and hills, producing coffee and cotton in the northern districts of Marie Galante; the third is a small island, six miles from Guadaloupe. We shall consider St. Martin hereafter.

	Population.					*Population.*
Guadaloupe	26.168	free.	81.642	slaves.—	Total	107.110
Marie Galante	3.072	"	10.116	"	"	13.188
Saiutes	570	"	569	"	"	1.139
Desirada	498	"	1.070	"	"	1.568
St. Martin (French)	544	"	2.925	"	"	3.869
	31.252		96.322			127.574

About one-fourth part only of these islands is in cultivation, producing sugar, molasses, rum, coffee, cotton, cocoa, cloves and tobacco. The colony has two delegates in Paris.

Martinique is of volcanic formation, and two-fifths of the surface has been reduced to cultivation. Population, 100.000; capital, St. Pierre, the largest and best built town in the Lesser Antilles, with a population of 20.000. It is well fortified. Fort Trinite′, a town of 6.000 inhabitants, on the eastern coast, has a large trade. Area of Martinique, 244.348 English acres. The cultivation of sugar cane has progressed rapidly of late. Four or five hundred persons are engaged in navigation and the coasting trade. In 1826 there were employed in sugar making one hundred and eighty-three water mills, twenty-seven wind mills, and two hundred and eleven cattle mills. In 1836 were added thirteen *steam* mills. The number may now be supposed larger. The population in 1836 was, free, 37.955; slaves, 78.076; free whites estimated 9.000. From 1831 to 1836, 17.579 slaves were emancipated, and to 1842, 3.534 more. We have seen a higher estimate of population, viz.: 40.000 free and 117.592 slaves.

In 1831 a law was passed providing for the gradual emancipation of slavery throughout the French West Indies, which has been carried out in some degree, it being the intention of France to rely upon the beet root at home for her supply of sugar, should the worst happen from this change. One would suppose she has already paid sufficiently for this *home sugar* monopoly. An account before us states the whole slave population of French West Indies at 229.708, and whites 77.115. The sugar crop is estimated at 147.652.022—only a little short of that of Louisiana the past year. This sugar pays a duty in France of $7.000.000. It remains to be seen, though it can easily be predicted, what shall become of all this sugar when emancipation falls like a blight upon the island.

OFFICIAL VALUE OF THE TRADE OF FRANCE WITH GUADALOUPE.

		IMPORTS.		EXPORTS.	
		Gen. Trade.	*Spec. Trade.*	*Gen. Trade.*	*Spec. Trade.*
1831	francs	26.184.000	23.910.000	12.143.000	12.817.000
1832		23.367.000	24.328.000	22.908.000	22.491.000
1833		21.161.000	19.371.000	12.296.000	22.236.000
1834		24.556.000	18.390.000	14.385.000	14.386.000
1835		23.738.000	18.806.000	16.508.000	16.362.000
1836		23.641.000	18.687.000	20.204.000	19.945.000
1837		17.236.000	18.251.000	17.615.000	17.578.000
1838		21.502.000	17.046.000	15.193.000	15.018.000
1839		25.276.000	18.707.000	14.726.000	14.560.000
1840		20.333.000	20.769.000	16.807.000	16.431.000
1841		20.445.000	15.792.000	17.377.000	17.357.000

TRADE FRANCE AND GUADALOUPE, 1841.—EXPORTS.

	Gen. Trade.	*Special.*		*Gen. Trade.*	*Special.*
Sugar.......francs	18.886.000..	14.292.000	Cocoa...........	15.000..	14.000
Coffee.......	780.000..	697.000	Sweetmeats.......	9.000..	7.000
Dye & Cabinet woods.....	295.000..	274.000	Cassia...........	———	———
Rum & Taffia	182.000..	177.000	Annato...........	———	———
Cotton Wool..	145.000..	156.000	Tobacco	———	———
Hides untan'd	54.000..	84.000	Iron Cables......	4.000..	2.000
Copper......	37.000..	37.000	Tortoise shells....	2.000..	2.000
			Other articles.....	56.000..	50.000

IMPORTS GUADALOUPE, 1841.

Tissues of Cotton....francs	4.637.000	Salt Meat........... francs	247.000
" Flax, &c..	2.204.000	Goods for use........	230.000
" Silk......	335.000	Medicines...........	202.000
" Wool.....	424.000	Haberdashery.........	180.000
Hides, tanned........	950.000	Paper, &c............	164.000
Wines...............	859.000	Perfumery...........	161.000
Brandy, &c..........	153.000	Wood...............	144.000
Wheat meal.........	811.000	Blood...............	30.000
Metals, worked......	630.000	Casks, empty........	14.000
Butter..............	495.000	Jewelry.............	480.000
Cod Fish...........	454.000	Colors..............	123.000
Mules.............	424.000	Materials...........	152.000
Olive Oil...........	370.000	Other articles........	1.982.000
Wax, &c............	261.000		
Pottery, &c.........	261.000	Total...............	17.377.000

OFFICIAL TRADE OF FRANCE WITH MARTINIQUE.

		IMPORTS.		EXPORTS.	
		Gen. Trade.	*Spec. Trade.*	*Gen. Trade.*	*Spec. Trade.*
1831	francs	18.992.000	17.454.000	12.638.000	13.649.000
1832		16.493.000	16.956.000	21.259.000	19.261.000
1833		14.762.000	13.270.000	12.438.000	12.399.000
1834		17.230.000	13.601.000	14.465.000	14.480.000
1835		16.214.000	13.181.000	16.710.000	16.369.000
1836		15.429.000	13.175.000	15.656.000	15.068.000

-	13.428.000	12.513.000	17.308.000	17.283.000
-	17.112.000	12.020.000	15.594.000	15.496.000
-	17.277.000	14.104.000	16.507.000	16.366.000
-	15.390.000	14.901.000	20.955.000	20.869.000
-	16.664.000	14.545.000	18.330.000	18.315.000

TRADE FRANCE AND MARTINIQUE, 1841.

	Gen. Trade.	*Special.*		*Gen. Trade.*	*Special.*
ar......francs	14.670.000..	13.000.000	Old Iron.........	43.000..	43.000
ee......	430.000..	414.000	Tortoise shell	15.000..	12.000
Woods.	339.000..	365.000	Sweetmeats......	13.000..	12.000
n & Taffia	284.000..	214.000	Gold sweepings...	9.000..	19.000
nia......	221.000..	4.000	Cotton Wool.....	———	———
illa.....	194.000..	25.000	Brass, raw.......	———	———
es......	156.000..	147.000	Tin.............	1.000..	1.000
oa......	128.000..	93.000	Lead............	1.000..	1.000
per.....	72.000..	72.000	Other articles.....	88.000.	123.000

IMPORTS MARTINIQUE, 1841.

ues of Cotton....francs	4.302.000	Butter....................	387.000
" Flax	2.502.000	Perfumery	326.000
" Wool...........	448.000	Cod Fish..................	281.000
" Silk............	425.000	Haberdashery..............	268.000
ines....................	1.139.000	Mules	229.000
les.....................	1.004.000	Medicines.................	185.000
ve Oil..................	680.000	Goods	179.000
Meat	540.000	Paper, &c.	152.000
tery, &c................	495.000	Wood	79.000
elry, &c................	455.000	Soap	63.000
tal works...............	451.000	Thread....................	54.000
ur......................	500.000	Materials	116.000
dles....................	417.000	Other articles...............	2.638.000

. **Dependencies of Great Britain.**—The extraordinary colonial
pire, extending over all the world, which Britain has maintained
hin the last three centuries, is an object of admiration, however con-
iplated. Even the errors of her policy, co-operated by almost uni-
sal adoption among other nations, and so much reprobated by en-
htened economists of the present day, are lost sight of in the magni-
le of the results. Her aim has been *extension* and POWER, and
aritime supremacy" and "commerce." She has regarded the surest
ans of obtaining and perpetuating these. Although despoiled of
thirteen colonies, and of the immense territories of the American
ion, which her oppressions drove into successful revolt, she has still
on the continent and approximate inlands, as much of territory re-
ining as the whole United States, supposing we come out of this
xican war with our old boundaries. With even this, however, her
ving appetite for empire is ill appeased.

The possession of colonies, whatever might have been the fancies of
er times, or even the results, is never likely again, in the notions of
erty, independence, and free commerce, universally afloat, to be of
ch advantage to the parent country. They will not, it is hardly
pposable, in the future, submit to arbitrary restrictions and irrespon-
le power, exercised from abroad. The colonist is a free man in his
w, as much as in his old home. He loses no right. If anything, his
lependent step should attach other, and even higher, rights and priv-
ges. His connection with the home government is nothing, save

only so far as it is his will to be connected. If protection be required, their allegiance is due, to that extent, and no more. He can elect at pleasure to change his government, whose only force exists of right in sufferance. In view of these truths, how remarkable and atrocious, then, must appear those arbitrary systems of colonial empire which the nations of the old world have so arrogantly set up!

An able English writer has expressed these opinions in a manner which defies contradiction, and we extract with great pleasure:

"We hope it will not be supposed, from any thing now stated, that we consider the foundation of colonial establishment, as generally speaking, inexpedient—we entertain no such opinion. It is not to the establishment of colonies, provided they be placed in advantageous situations, but to the trammels that have been laid upon their industry and the interference exercised by the mother countries, in their domestic concerns, that we object. Every individual ought to have full liberty to leave his native country, and occasions very frequently occur, when governments may advantageously interfere to settle emigrants in foreign countries; and when the soundest policy dictates the propriety of their supporting and protecting them until they are in a situation to support and protect themselves. There can be no question whatever, that Europe has been prodigiously benefited by the colonization of America. The colonists carried the arts, the sciences, the language, and the religion of the most civilized communities of the old world, to regions of vast extent, and great natural facilities, occupied only by a few miserable savages. The empire of civilization has, in consequence, been immeasurably extended, and while the experience afforded by the use and progress of communities, placed under such novel circumstances, has served to elucidate and establish many most important and fundamental principles in government and legislation, Europe has been enriched by the vast variety of new products America has afforded to stimulate the inventive powers of genius, and to reward the patient hand of industry.

"But whatever may have been the advantages hitherto derived from the colonization of America, they are trifling, compared to what they would have been, had the European powers left the colonists at liberty to avail themselves of all the advantages of their situations, and avoided encumbering themselves with the government of extensive territories 3000 miles distant. Fortunately, however, a new era has at length begun—*novus saeclorum nascitur ordo!* The monopoly of the trade of America is destroyed, and her independence achieved. From Canada to Cape Horn, every port is ready to receive adventurers from Europe: and a boundless field has, in consequence, been opened for the reception of our surplus population, and for the advantageous employment of European arts, capital and skill. The few remains of the old colonial system which still exist, and which are principally to be found in the mercantile policy of this country and France, cannot be of long duration. Their mischievous operation is no longer doubtful, and they will disappear according as the knowledge of sound commercial principles is more generally diffused."—*M'Culloch on Colonies*, 1 *Com. Dic.* 413.

Antigua, a fertile island, forty miles north of Guadaloupe, twenty-five northeast of Montserrat, and thirty south of Burmuda, is eighteen miles in length and twelve in breadth, covering an area of one hundred and seven square miles. Its form is of an irregular oval, shore high and rocky, indented by bays and harbors. Except to the southwest, the approach to the island is very dangerous. Sugar plantations are scattered over more than one-half of it, and provisions are raised on the remainder. It has several good harbors, the best of which is English harbor, deep enough to admit the largest ships. A narrow isthmus divides it from Falmouth Bay, at the bottom of which lies a very thriving place called after the bay. St. Johns is the capital of the island.

Columbus discovered this island in 1493, and named it after a church in Seville. In 1666 it was taken by the French, in whose possession did not long remain. The climate of Antigua is healthy. From 17 to 1836, the average annual mortality was not more than half at of the West Indies generally. During the same period, the births mong the slave population more than compensated, by seven hundred, e decrease by deaths. In Louisiana, far different results are apparent.

The products of the island are sugar, molasses, rum, and small antities of arrow root and tobacco.

QUANTITIES SHIPPED IN 1836.

Sugar	15.739.180 lbs.
Molasses	522.050 gallons.
Rum	11.362 "
Arrow root	25.290 lbs.
Tobacco	21.000 "

The rum is of excellent quality. Value of exports in 1836, £175.808; ports, £191.817. Sugar has for a long time been the staple producon of the island. The cane is said to have been introduced by Col. odrington, who settled on the island in 1674. The quality was at first lack, harsh and coarse, but these obstacles were at length overcome, nd a grade of sugar produced equal to any shipped to the European arkets.

Mr. Coleridge thus describes the island as approached from the haror of St. Johns:

> "The heart of the island is verdant with an abundant pasturage of grassy down, nd the numerous houses of the planters, embosomed in trees, have more of the ppearance of country mansions in England than almost any other in the West ndies. The shores are indented in every direction with creeks, and bays, and oves—some of them running into the center of the plantations like canals—some welling into estuaries, and others forming spacious harbors. Beyond these, an innite variety of islands and islets stud the bosom of the blue sea, and stand out, ke so many advanced posts of defense, against the invading waves. They are of ll shapes and sizes, and are given up to the rearing of provisions and the maintenance of a great number of cattle. From the same hill (Monk's Hill), when the western sky is clear, Guadaloupe, Montserrat, Nevis and St. Kitts, may all be disinguished by the naked eye."

QUANTITY AND VALUE OF VARIOUS ARTICLES OF MERCHANDISE EXPORTED FROM ANTIGUA DURING THE YEAR 1832.

Description of Goods.		Quantity.	Value in sterling money.
Arrow root	lbs.	8.354	£ 342
Coffee, colonial	lbs.	31.284	781
Copper, old	lbs.	25.066	999
Corn, viz., Wheat Flour	bbls.	7	14
Dye and hard woods, colonial	tons.	6	20
Fruits	value.	———	2
Hides	number.	312	107
ron and Steel manufacture, British	value.	———	25
Lime Juice	gallons.	90	3
Linens, entered by the yard, Br.	yards.	140	4
Molasses	gallons.	678.500	26.652
Spirits, Rum	gallons.	115.420	7.023
" Shrub	gallons.	390	32
Succades	value.	———	8
Sugar	lbs.	17.165.610	126.403
Tobacco	lbs.	400	4
Tortoise Shell	lbs.	56	84

Wines of all sorts........................	gallons.	265	77
Wood....................................	value.	———	5
Miscellaneous articles	value.	———	6.659
Total..			£169.244

Barbadoes—One of the lesser Antilles and the most ancient of British colonies, is about one hundred miles east from St. Vincent. It is twenty miles long and, in the widest part, about fifteen broad. As compared with other islands, the surface is low. There are no traces of volcanic action in Barbadoes,* though, at intervals of several years, there are tremendous hurricanes exceedingly destructive of life and property.

It is not known when Barbadoes was first discovered. Previously to 1600, it was not noticed on the charts of European navigators. By no hostile force has Barbadoes ever been captured. It is said to have been first visited by the Portuguese, who named it Los Barbados, from the number of fig trees—whose branches were likened to luxurious beards.

Barbadoes is surrounded by coral shoals and reefs. The number of sugar estates in this island is five hundred—worked, with the exception of one steam mill, entirely by wind. The population, in 1844, numbered 123,000—two-thirds black. There are five newspapers published at Bridgeton, and a paper was established as early as 1731. In 1842 there were forty-four merchant vessels, and a hundred and eighteen transient traders, doing business regularly with the island. Imports, 1842, from Britain, £459,180; foreign and colonial, £50,936. One-sixth of the imports are cod-fish, grain and flour, chiefly from the United States and British North America. The exports are sugar, rum, molasses, arrow root, aloes, cotton, ginger, cocoanuts, logwood, hides, tamarinds, cocoa, coffee, &c. Indigo, tobacco and fustic, were formerly grown. The export of cotton is only about three hundred bales. This is the only English island where the export of sugar has not diminished since emancipation.

EXPORTS OF BARBADOES, 1831–43.

	SUGAR. cwt.	RUM. gallons.	COCOA. lbs.	MOLASSES. cwt.	COFFEE. lbs.
1831	322.779	20.730	2.554	15.562	2.430
1832	266.464	5.740	2.468	7.081	158.199
1833	384.971	696	8.403	47.246	48.371
1834	394.527	2.170	72	55.525	77.868
1835	344.689	1.798	77	58.125	57.825
1836	373.428	738	4	47.558	33.523
1837	445.713	914	7.115	70.203	24.619
1838	473.587	455	2.652	98.683	37.569
1839	395.109	502	6	76.444	20.884
1840	207.484	778	31.016	35.959	74.167
1841	257.108	250		25.475	1.513
1842	312.563	158	35.054	53.003	19.066
1843	349.048	460	18.476	68.975	12.837

North of *Antigua* is situated the unimportant island of *Burmuda*, whose population, chiefly black and not exceeding four hundred, occu-lies a territory fifteen miles in length and eight wide. Corn, cotton, pepper, tobacco, &c., are produced abundantly, but no sugar. The government is proprietary.

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* The base of the island being of calcareous rock, formed of madrepores and other marine concretions, is supposed, like many of the surrounding isles, to be of volcanic origin.

Anguilla, the most northerly of the Carribean islands—named from its resemblance to a snake. Length twenty-five to thirty miles, breadth six miles; population three thousand, two thousand four hundred being black. The island has only been partially cultivated, and the products are not numerous.

Dominica is in surface 186,436 acres, and sustains a population of 18.830—14.384 being black. The soil is light and more fitted for coffee than sugar. Cabinet woods abound, and good fisheries. The average export of sugar, in 1836, 1837 and 1838, was about 35,000 cwt.; of coffee 240.000lbs.; rum 10.000 gallons: value of exports, in 1836, £78.282; imports £68,077. The island was discovered by Columbus in 1493; ceded to England by France in 1763; retaken by the French in 1778, and restored at the peace of 1783.

Grenada—Area 80.000 acres; population in 1836, whites and free colored races, 4220, apprenticed laborers 18,316. The climate is unhealthy, though the soil is very prolific. The imports into Britain from Grenada were, in 1838:

Sugar, raw	156.798 cwts.
Rum	234.991 galls.
Molasses	18.359 cwts.
Coffee	21.647 lbs.
Cotton	109.945 "
Cocoa	426.626 "
Arrow Root	3.630 "

St. George, the capital, has a population of 2.780. The island was colonized by the French about 1650; was afterward taken by Britain; retaken; and finally restored. Lieut. Col. Capadose, who visited the colony a few years ago, remarks: "Grenada has flourished, but its commerce has declined; estates once valuable have been sold at a ruinous loss to the owners; and it is melancholy to see the empty stores and warehouses on the quay: why this is, one more skilled in commercial statistics must determine. I can but hope brighter days are to come, when the sun of prosperity will again shine on the lovely mountains and valleys of Grenada, and make it as rich in civilization and trade as it is in the beauties of nature; when it will be estimated, not for the Italian softness of its scenery, but regarded as a pearl of great price among the Antilles."*

Montserrat is a small island dependency of Antigua, whose area is but 30.000 acres and population 7.600, mostly blacks. The country is highly mountainous. The health is favorable. Exports, sugar, 1839, 13.443 cwts.; and 29.460 galls rum. Value of exports and imports £9.500 each. It was originally colonized by the English.

Nevis.—Population 11.500; length 6¼ miles, breadth about the same. The inhabitants find employ chiefly in the cane culture and preparation of rum. In 1839, 36.466 cwts. sugar, and 39.252 gallons rum, were exported to England. Exports, £12.203; imports. £27.183.

St. Christopher.—The population in 1844 was 23.177. The whole area is 43.720 acres, one-half being unfit for cultivation. Sugar is chiefly raised, and the export of the island in 1838 was 91.765 cwts.; in 1843, 6.851 hhds. The whole exports and imports of 1836, £244.047. It was ceded to the English at the treaty of Utrecht in 1713. Capadose remarks: "The inhabitants of St. Christopher may well boast of their island beauties; and in good truth, if the loveliness of nature can produce happiness, they are blessed indeed."

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* Sixteen years in West Indies, vol. i, p. 226, London, 1845.

St. Lucia.—By the last census it contains 13.448 blacks, and 16.017 inhabitants. The tables of mortality almost prove it the graveyard of the West Indies. The harbor of Carenage is a splendid and capacious one. The exports in 1835 were, sugar, 50.215 cwt.; rum, 14.051 galls.; molasses, 11.029 cwt.; coffee, 84.000 lbs. It was ceded to France in 1763, but afterwards retaken by England.

St. Vincent.—Area 85.000 acres; population 27.248 in 1844, of which 22.997 were blacks. One-third of the surface is in cultivation. Exports, in 1841, 110.205 cwts. sugar; 88,999 gallons rum, &c. The island, like others of the West Indies, has several times changed hands between France and England.

Tabago.—The interior lands have not been brought into cultivation, but are still forests. The island was colonized, first by the Dutch, and then by the Courlanders. It then changed hands twice between France and England. It is productive in every plant that grows in the Antilles. "Throughout the whole island there is but little social intercourse, as the inhabitants are scattered, and the roads, the greater part of the year, in such a state as precludes visiting. But most of the estates are advantageously situated, and the scenery around them picturesque and attractive. The variety of its trees, shrubs, flowers and vegetables, render it interesting to the botanist."

Virgin Isles.—These include the petty islands of Anegada, Tartola and Virgin Gorda. From Capadose's Travels, we extract the following sketch of Tartola, the most important of the group: "It is different in appearance from any of the other colonies, being an island of mountains; on the summits of several are large table-lands well cultivated. The people live secluded lives, cultivating their own fruits and vegetables; feeding a few sheep and poultry; fishing or catching the wild ducks, which abound in all the mountain lakes on the island. I doubt whether this little island will ever rise above its present excellence; it is not adapted for colonization, and can be of but little value unless for a fortification."

Honduras and Guaiana are included in the British West Indies, though not *islands*. *Honduras*, or Balize, is on the east coast of Central America. The climate is moist but healthy. The forests abound with the most valuable woods, mahogany, logwood, &c., the main products of the colony. The mahogany is a majestic tree, arriving at maturity in two hundred years! The trees are rafted down the rivers. Three logs have been sold as high in London as £3.000, according to M'Culloch, the product of one tree! The logwood grows abundant in high grounds. In 1836, 28.313 tons shipping arrived and 29.492 tons departed. The only town is *Balize*, at the mouth of the Balize river, which has about five hundred houses. Great Britain received possession from Spain in 1670, but there were afterwards several con-ts about it. The colony is important, from its situation between ucatan and Guatemala on the North American coast, for military perations in this region. Its area is 16,400 square miles; 175 miles n length, and 110 in width. The British at one time even claimed he east shore of Yucatan, but surrendered the pretension in 1763. ucatan still asserts confidently her rights *to the whole of Balize to le Mosquito Shore.* Population of Balize in 1845, 399 whites; 10.410 olored. Nothing is said to be requisite but the application of labor nd capital to render it a most productive sugar country; and many ther products exclusive of mahogany might be drawn from its soil nd its forests. Laborers could be induced from Yucatan.

Guaiana.—The *British portion* is most northward on the South merican coast, and, with a shore of four hundred miles, includes bout 76.000 miles of territory. Guaiana is favorable for every tropial product. The inhabitants are aborigines, Dutch, English, Europens, Africans, and are in number 82.924 negroes, 9.076 colored, 5.000 hites. The three departments are *Demerara, Essequibo and Berbice,* hose chief towns are Georgetown and New Amsterdam. England ontested for a long time the possession of Guaiana with the Dutch, ut finally seized upon it in 1803. Population in 1843, 120.000; prouce same year:

ugar	54.674.009 lbs.	Rum	147.830 galls
lolasses	2.020.354 galls.	Coffee	1.924.000 lbs.

Since the *emancipation*, many estates have been abandoned. The overnor, however, in his address of 1843, says: "A steady augmentation f population, &c., cannot fail to raise this magnificent colony to that igh rank among the dependencies of the British crown, to which its xtent, capabilities and fertility give it so just and natural a claim."*

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* The *Mosquito Territory*, for various reasons, and chiefly the alledged British terference in its policy and claims, has grown of sufficient importance to require elaborate note. It extends westward from Spanish Honduras to the sea, with a ost extensive coast. Honduras, asserting its independence, has maintained con nual hostilities with Guatemala. The Spanish, it is asserted by McGreggor, ever subjugated or occupied Mosquito, though the British had long ago a fort and ading huts, which they were forced by Spain to abandon. The Mosquito Indis are spoken of in very high terms: "Their love of liberty, added to their natul bravery, impelled them to maintain, in sovereign independency, the possession their mountains, valleys, woods, lakes and rivers, against the superior arms and ts of Spain." They have readily allied themselves with the English and look to em for protection. During the war in 1749, so important was considered the ossession of the Mosquito Coast, that the British at once established a garrison ere. The settlers, in hopes of a province being set up by the crown, began to ultivate the soil extensively. Eight of the settlers are said to have bought a large act of land, seventy miles long and thirty broad. A system of government was stablished over them by the home government. These steps were regarded with ealousy by the Spaniards, and the two nations successively won and lost the astery of the territory. In 1786, on the discussion of claims, the British minisry determined upon a surrender to the crown of Spain. There is sufficient roof that several parts of Mosquito are decidedly more salubrious than any other Vest India settlements. The supplies of cabinet woods of every sort are inexaustible. Sugar, coffee, cotton, tobacco and indigo, could be advantageously cul ivated. This is the British account of the matter.

The Mosquito Territory is considered by McGreggor as "independent and under he protection and sovereignty of England;" which is much the same as to say, in n English possession. The present George, "king of the Mosquito Shore

EXPORTS OF GUAIANA IN TEN YEARS.

YEARS.	SUGAR. hhds.	RUM. punch.	MOLASSES. hhds.	COFFEE. lbs.	COTTON. bales.
1834...	55.277	19.517	33.413	2.532.000	3.376
1835...	67.248	27.147	27.160	3.278.930	2.319
1836...	71.280	24.626	38.088	4.801.350	3.196
1837...	62.520	17.602	31.429	4.066.950	2.510
1838...	54.535	18.431	25.508	4.186.790	1.083
1839...	38.444	16.071	12.134	2.003.250	1.364
1840...	40.656	21.199	15.999	3.357.300	231
1841...	34.199	11.118	16.179	1.088.670	170
1842...	36.211	11.631	17.894	2.177.120	40
1843...	35.938	8.296	24.957	1.428.100	24
1844...	38.999	11.706	21.677	1.490.737	0

Bahama.—This group consists of several hundred islands, extending south-east six hundred miles between Florida and Hayti. They are of coral formation, scantily covered with soil, and mostly uninhabited. *New Providence*, from its harbor, is the most important. It is the seat of Government, and differs little, in general appearance, from the other islands. *Nassau* is the capital. The whole area of the islands is stated at 5.424 miles. Population in 1837, 19.943; two-thirds being black. The inhabitants are residents or wreckers. The latter are very numerous, and are daring navigators, who find constant employ from the dangerous keys, shoals and breakers by which they are surrounded. Number employed in agriculture, 3.590. Articles of product—corn, potatoes, yams, peas, beans, pine apples, cotton, ochre, cassada, pumpkins, arrow root, oranges, limes, lemons. Dye woods are largely exported, and vast quantities of salt. Exports, in 1834, £92.802; imports, £142.021. The Bahamas were settled by the British in 1629. They were driven out by the Spaniards, who in turn were expelled. The French and Spaniards, combined, took possession in 1703. From that period till the cession to Britain in 1783, the islands were a famous rendezvous for pirates.

Burmuda.—This is a group of three hundred and fifty small islands on the Atlantic, east of South Carolina. The population is 8.000, of whom half are black. *Hamilton* is the capital. The exports are arrow root, potatoes, onions, palmetto and straw hats. They have one hundred vessels engaged in the West India carrying trade. About one thousand barrels of oil are taken annually on the coasts.

EXPORTS AND IMPORTS FOR THE YEAR ENDING JANUARY, 1847.

	Imports.	*Exports.*
From Great Britain	£52.079	2.943
" North America	3.199	907

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nation," was educated, we believe, in England, and crowned May, 1845. The British government keep up a resident agency in the country.

Honduras and Mosquito, together, are three hundred and ninety-nine miles long and one hundred and fifty wide; area, 48.500 square miles. An able historical and descriptive sketch has been written by Mr. Roberts. On a review of the whole, it is observed by McGreggor, "it is evident that the Mosquito Territory is a most important region of America." British subjects have settled in various parts. Mr. Walker, the resident agent, employs much of his time in endeavoring to improve the *morale* and condition of the creoles. An ensign and standard for the nation, were sent out to them from England. It would be well for the United States, whose policy is non-interference by Europeans on the American continent, to have a vigilant eye to the movements on the Mosquito Coast.

From British West Indies	3.881	7.024
" United States	65.762	5.107
" Foreign states	9.267	3.309
	£134.189	£18.592

Number of vessels entered in 1846, one hundred and ninety-four, of 25.686 tonnage inward, and one hundred and ninety-six, of 25.565 tonnage outward; 1847, one hundred and sixty-eight vessels, 19.962 tons inward, one hundred and sixty-six, 19.625 tons outward.

STAPLE PRODUCTIONS.

	1846.	1847.
Arrow root	£8.084	4.115
Onions	1.782	1.637
Potatoes	1.036	1.845
Oil	129	——

The exports of arrow root and potatoes have been increasing very rapidly of late years.

Trinidad.—In the immediate vicinity of Columbia, and the most distant of all the islands from the United States, is *Trinidad*, which, for commercial importance, is second only to Jamaica. Area about 2000 square miles. The interior is uncultivated and almost unexplored. The soil is in general fertile, and is supposed sufficient to supply all England with sugar. One-thirtieth of the surface only is capable of cultivation. In 1838 there were 184 sugar estates, with an invested capital of £2.000.000 sterling. A deficiency of labor has long been a serious drawback to the estates. Cocoa is extensively cultivated; asphaltum is found abundantly. The progress of the island has been chiefly since 1783. It has been held by the French and Spaniards as well as by the English. The population of Trinidad is stated as low as 39.000, and as high as 70.000, by different writers. There were, in 1840, 180 sugar estates, 104 distilleries on estates, 21.710 acres in cane, 6.910 acres in cocoa, 1.095 in coffee, 6.313 in provisions, and 7.237 in pastures.

Jamaica.—This most important of all the British islands, lies about one hundred miles south of Cuba, has an area of 6.250 square miles, and a population of 380.000, of whom, in 1835, 311.000 were blacks. Whilst the yellow fever rages on the low grounds, the elevated regions enjoy perfect health. The island is not generally fertile, but requires much culture. Indigo, coffee and cocoa, formerly much cultivated, have been given up. Every variety of tropical fruit and the most valuable dye and cabinet woods flourish. The European population are English, Irish, Scotch, French, German and Portuguese. But little of the island remains in the hands of the crown to be granted. The largest estates are about 1200 acres, but it is impossible to procure a force to work them, as the freed negroes will only work a few hours each day, and a few days each week. Labor and rent are the chief subjects of agitation. The coffee estates have suffered less by emancipation, as Europeans cultivate them to an extent. But we shall refer to these things bye and bye.

Jamaica was settled by the Spaniards in 1503, and remained with them till its conquest by England in 1655. In 1772 the exports were 11.000 hhds. sugar; in 1774, 78.000. The island suffered from the

American war. The insurrection in St. Domingo stimulated the sugar production of Jamaica, which, in 1802, reached 143.000 hhds. The same may be said of coffee, which from 60.000 pounds in 1752, reached 19.811.000 in 1832. St. Jago is the seat of government, but Kingston the largest town.

The imports in Jamaica in 1845 required 125.421 tonnage, being 12.000 tons greater than the previous year. The following are the imports of 1843 and 1844:

TABLE OF IMPORTS TO JAMAICA.

1844.	1843.
Flour—98.779 bbls., 2.892 half bbls.	66.289 bbls., 1.665 half bbls.
Corn Meal—26 puns., 22.156 bbls.	3 puncheons, 9.748 bbls.
Rice—1.362 trs., 235 half trs., 16.122 bags.	1.756 trs., 426 half trs., 9.069 b
Fish, Cod—3.897 hhds., 9.488 trs., 18.960 bxs.	5.421 hhds., 7.952 trs., [illegible]
Haddock—79 casks.	135 casks.
Mackerel—8.912 bbls.	23.643 bbls.
Alewives—4.696 bbls.	2.926 bbls.
Herrings—3.803 bbls.	2.853 bbls.
Salmon—281 tierces, 1.045 bbls.	408 tierces, 1.440 bbls.
Oil—1.928 casks.	2.647 casks.
Bread—16.305 bbls.	13.376 bbls., 216 half bbls.
Butter—15.441 firkins, 2.166 kegs.	14.792 firkins, 2.410 kegs.
Lard—6.001 firkins, 2.640 kegs.	10.214 firkins, 1.574 kegs.
Candles—15.366 bxs., 310 half bxs.	25.041 boxes.
Soap—45.323 bxs.	33.566 boxes.
Pork—24.629 bbls., 2.215 half bbls.	13.489 bbls., 1.039 half bbls.
Beef—1.312 bbls., 2.500 half bbls.	821 bbls., 1.170 half bbls.
Tongues—336 half bbls., 401 firkins.	1.519 half bbls., 256 firkins.
Brandy—3 pipes, 551 hhds.	401 hhds.
Wine—243 pipes, 469 hhds., 809 qr. casks.	112 pipes, 488 hhds., 1.362 qr.
Tobacco—98 hhds.	54 hhds.
Corn—45.615 bags.	34.162 bags.
Salt—11 hhds., 883 tierces.	30 hhds., 1.032 tierces.
Lumber, P. P.—1.260.016 feet.	555.000 feet.
W. P.—2.044.581 feet.	2.170.488 feet.
Staves, R. O.—73.410.	360.963
W. O.—65.100.	212.740
Wood Hoops—213.170.	323.910
Shingles, Cedar—1.773.410.	2.228.090
Cypress—1.334.070.	1.182.670

SUGAR CROPS OF JAMAICA FROM 1790 TO 1846.

1790..... 91.131 hhds.
1791..... 91.051
1792..... 91.021
1793..... 82.136
1794..... 97.124
1795..... 95.372
1796..... 96.460
1797..... 85.109
1798..... 95.858
1799.....110.646
1800.....105.584
1801.....136.036
1802.....140.113
1803.....115.496
1804.....112.163
1805.....152.352
1806.....146.601
1807.....135.203
1808.....132.383
1809.....114.630 hhds.
1810.....112.208
1811.....138.292
1812.....113.173
1813.....109.158
1814.....104.558
1815.....127.209
1816.....100.382
1817.....123.766
1818.....121.758
1819.....116.382
1820.....122.922
1821.....119.560
1822..... 94.511
1823.....101.271
1824.....106.009
1825..... 72.090
1826.....106.712
1827..... 87.399
1828.....101.675
1829..... 97.893
1830.....100.205
1831..... 94.381
1832..... 98.686
1833..... 85.101
1834..... 84.756
1835..... 77.970
1836..... 67.094
1837..... 61.505
1838..... 69.613
1839..... 49.243
1840..... 33.066
1841..... 34.491
1842..... 50.295
1843..... 44.169
1844..... 34.444
1845..... 47.926

From a letter of Dr. Binns to Lord Normanby, we learn that Jamaica is exposed to an easy conquest by a foreign power. Dr. Binns says: "With a single steamer, carrying one thousand men and one long gun, incalculable mischief might be done ere the queen's troops could be got under arms, or the militia assembled. But *with five thousand men, the island, in spite of the most gallant defense, must surrender.*"

We have failed in obtaining any very late tables showing the gross amount of the trade of all the British West Indies with the rest of the world. The reader, however, under the head of each of the islands, will have found much to guide him in making a correct estimate. The following comprises the trade of the islands with the mother country during twenty years; and we shall see, hereafter, that the depreciation which is annually shown, has continued down to the present day:

TRADE OF GREAT BRITAIN AND COLONIES.

	EXPORTS FROM ISLS. Official val. £s.	EXPTS. TO in £s.	DECLARED VAL. Exports in £s.		IMS. FROM ISLANDS. Official val. in £s.	EXP. TO in £s.	DEC. VALUE. Exports.
1814	9 022.309	6.222.138	7.019.938	1825	7.932.829	4.997.270	3.866.834
1815	9.903.260	7 196.081	7.218.057	1826	8 420.454	4.047.604	3.193.265
1816	7.847.895	4.852 228	4 537.056	1827	8.380.833	5.017.375	3.683.222
1817	8.326.926	7.015.591	5.890.199	1828	9.496.950	4.461.071	3.289.704
1818	8.603.790	5.989.707	6.021.627	1829	9.087.923	5.521.256	3.612.085
1819	8.188.539	4.692.414	4.841:753	1830	8.599.100	5.040.677	2 838.448
1820	8.353.706	4.561.350	4.157.761	1831	8.448 839	3.988.266	2.581.949
1821	3.667.477	5.311.347	4.320.581	1832	8.168.668	4.100.426	2.439.807
1822	8.019.765	4.370.178	3.439 818	1833	8.003.248	4.704.180	2.597.591
1823	8.425.276	5.906.863	3.676 780	1834	5.410.113	4.818.646	2.680.022
1824	9.065.546	5.167.931	3.827.489				

EXPORTS FROM UNITED KINGDOM TO BRITISH WEST INDIES.

1840	£3.574.970	1844	£2.452.400
1841	2.504.004	1845	2.789.211
1842	2.591.425	1846–7	2.505.695
1843	2.882.441		

TRADE BRITISH WEST INDIES AND UNITED STATES.

EXPORTS U. STATES.		IMPORTS U. STATES.	
Fish oil and Candles	$33.609	Bullion and specie	$345.294
Staves, &c	312.342	Coffee, Cocoa, &c	6.459
Masts and Naval Stores	3.916	Copper and Brass	42.430
Provisions and Spirits	772.408	Dye-Wood	19.154
Horses and Mules	215.902	Mahogany	4.049
Sheep	14.699	Wines, &c	4.785
Bread Stuffs	2.194.052	Molasses	2.917
Rice	159.739	Sugar	22.206
Tobacco	36.885	Spices	38.699
Gold and Silver Coin	6.160	Coal	765
Manufactures	287.782	Salt	99.693
Others	76.724	Manufactures	16.497
		Sundries	84.958
Domestic Exports	$4.114.218		
Foreign	21.828	Total	$687.906
Total	$4.136.046		

VESSELS OWNED IN BRITISH COLONIES, 1844.

	VESSELS.	TONNAGE.	CREWS.		VESSELS.	TONNAGE.	CREWS.
Antigua	55	833	220	Montserrat	4	100	
Bahamas	140	3.252	686	Nevis	11	178	
Barbados	37	1.640	305	St. Kitts	35	546	

Berbice..........	18	854	89	St. Lucia..........	19	913	132
Bermuda..........	54	3.623	323	St. Vincent.......	27	1.164	180
Demerara.........	54	2.352	250	Tobago...........	7	189	46
Dominica.........	14	502	85	Tartola...........	48	278	127
Grenada..........	43	812	198	Trinidad..........	61	1.832	378
Jamaica..........	116	4.363	633				
				Total........	7.304	592.839	40.659

The most obvious distinction which exists between the British and other West Indies, is that which grows out of the relationship of its white and colored population, and the experiment some years in progress of cultivating the products of the tropics by *free negro labor.* This reflection opens to us the whole subject of EMANCIPATION, of which the world has heard so much, and in the discussion of which we shall learn more of the true condition of the islands than can be gleaned from any of our previous facts and statistics. We crave the reader's undivided attention.

Slavery is an institution as old as society itself. In the most glorious eras of letters and liberty, it was at its height. We find it throughout all the dark ages. In the middle of the nineteenth century, in the full blaze of Christianity, science and civilization, its progress is unchecked and even accelerated. Every attempt at suppression has signally failed. Abolition has been "as sounding brass." The natural increase of slaves falls little short, in the United States, of 100.000 per annum, and it is not venturing too much to assert, that, for every slave liberated by one nation, another has been imported by its neighbor from the coast of Africa. The imports into Spanish colonies, Brazil, South America, &c., are many thousands annually. The supply is thus kept equal to the demand, and increases with it. There are perhaps as many slaves in the world, as the peculiar products which they are engaged in raising, and for which they only seem to be fitted, require. Emancipation is the measure of policy, when that number is temporarily too large. It is less heartless than the Spartan's extermination of his *helots*, but still mercenary, in that it is enjoying the laborer's prime and dismissing him to want when he ceases to be valuable. Even were the negro entitled to his freedom, man is selfish and will not give it to him, if it involves his pecuniary loss. Disregarding individual exceptions, the world has exhibited, as yet, no such benevolence.

It is doubtful whether men have not lost more than they have gained by abstract speculations upon liberty. The liberty of the uncivilized and barbarous man, is that of a wild beast. In the delirious excesses of unrestrained, unlimited liberty, men have proved themselves monsters and shocked high heaven with their atrocities. Demagogues, fanatics, those upon whom all government, however regular, sits like fetters of steel, are loudest in their vociferations for liberty, which is to them a license for every bad passion. Its meaning with these is very different from what the true patriot and lover of country claims. We have no faith here. In our opinion, no men, no nation of men, who were ever fit for true liberty, ever lost it. Dungeons, bolts and bars cannot confine—whips cannot tame its noble spirit. *The man who is a slave was never free!* We have no sympathy with the slave or the nation of slaves. They were made for that condition or they would never occupy it. Their happiness and prosperity are in this state; or, [illegible] wer (for with this every creature of God is endowed), they [illegible] ak the fetter, or at least die! Let them be slaves, for free-[illegible] such has no name, and would be a curse rather than a bless-[illegible] You could not enslave the North American Indian—he defies [illegible] bonds and dies free as his native air. You could not enslave the [illegible]-Saxon—for this our fathers in the old and the new world have [illegible] Could slavery even be *tolerable* to me, I would pray God to [illegible] me a slave. There is but one nation in all the world who [illegible] submit itself a willing, unresisting subject to slavery, *and that is* [illegible] *African!*

In every age of history the African has been a slave. His slavery began in his own country and to his own princes. The *lowest* rational being in the creation of God, next to the Hottentot, with capacities, mentally and physiologically considered, of the most groveling character, he has been the same in all ages and under all circumstances; with the identical characteristics in the cane fields of Cuba as four thousand years ago in the streets of Thebes![*] He does not repine, he does not rebel. Nothing higher incites him. He toils when he is bade, and ceases the very moment that constraint is removed. If liberated and left to himself, he degenerates back to barbarism, from the civilization which slavery brought him. In the sight of every other people he is degraded, whether nominally bond or free. Social intercourse with him is impossible. His experiments in self-government have been hideous failures, as we shall see directly in considering Hayti. Throughout the British West Indies, he is a political cypher, and only kept in place by the influence of a powerful government. Siera Leone and Liberia are experiments in the face of all experience. The former has already *failed.*

If the right to hold the African in bondage were in issue, though in fact the constraint comes from his own nature, and there were not the other strong, and, as we believe, irresistible arguments from history and the Bible, for it is unnecessary to lay any stress now upon the argument for policy, growing out of the condition in which whole communities find themselves placed; strong as that argument justly is, we would take the high ground, in view of every circumstance of his case, *that the negro was created essentially to be a slave, and finds his highest development and destiny in that condition.*[†] Nor can I see in this a contradiction, or one ground to except to the wisdom and goodness of his Creator, whose ways are too far above mine to be perfectly comprehended. Happiness, for aught I know, may be the ultimate end; and whatever condition produces the most of this, is right and good. As we are created with different intelligences little less than angels and idiots; with different constitutions, Hercules and imbeciles; in the frozen climates of the poles, where bread must be earned by struggles with terrible nature—or about the equator, where spontaneous fruits make earth a

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[*] The archæological and hieroglyphical researches, in Egypt, clearly demonstrate this—vide Gliddon's Lectures; Dr. Nott, in Southern Quarterly Review, and Commercial Review, Nov., 1847; also Dr. Cartwright in S. Q. Review.

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Berbice	18	854	89	St. Lucia	19	913	[illegible]
Bermuda	54	3.623	323	St. Vincent	27	1.164	[illegible]
Demerara	54	2.352	250	Tobago	7	189	[illegible]
Dominica	14	502	85	Tartola	48	278	[illegible]
Grenada	48	818	198	Trinidad	61	1.632	[illegible]
Jamaica	116	4.363	633				
				Total	7.304	592.839	[illegible]

The most obvious distinction which exists between the British and other West Indies, is that which grows out of the relationship of its white and colored population, and the experiment some years in progress of cultivating the products of the tropics by *free negro labor*. This reflection opens to us the whole subject of EMANCIPATION, of which the world has heard so much, and in the discussion of which we shall learn more of the true condition of the islands than can be gleaned from any of our previous facts and statistics. We crave the reader's undivided attention.

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There never was, perhaps, a more systematic slave dealer than Great Britain—not even New England—but, becoming suddenly afflicted with a sense of her wrongs, under the scourges of conscience, she took a turn and vowed henceforward the world should all be free. We make this charitable supposition of *conscientiousness* from the promptings of a liberal nature—for it is well known that *philanthropy* knocked a very long time at the doors of parliament before it was heard, and some have unkindly insinuated, was only heard when *interest* whispered *your West India possessions are not fertile enough to compete with foreign islands.* You have immense empires in the east, capable of unlimited production, which others have not. *Liberate your West India slaves: force them, as you can then, to liberate theirs, and you have the monopoly of the world!* This has been insinuated, and the late importation of African apprentices (?) squints awfully at the practical *interest* view of the matter.

But let this be as it may. Great Britain liberated her slaves, and we are about to show, however uncharitable in us, that whether instigated by the highest benevolence or most sordid interest, she has absurdly blundered in her course, injuring every one that she would have benefited, and benefiting every one she would have injured.

In 1838 the fiat went forth that 800.000 slaves were freemen, and that, in the sufferance of government, eight shillings in the pound value for every slave would be paid to his master. Thus by grinding taxation upon the laboring classes of England, was raised £20.000.000 to be applied to the purchase of £50.000.000 property, consecrated as such by law; and with little regard to the views of the property holders themselves, was secured emancipation. This was the first pecuniary cost. We shall see hereafter it was but a tithe of what had to be incurred.

There was an intermediate *apprenticeship* state established. Captain Capadose, who was in command of the forces when the news was received in the islands, gives us in his work, a graphic sketch of the scene: "The negroes crowded round to hear the news, frantic;" but when told of six years apprenticeship, "No six years, no six years, they ociferated beyond all bound of control." Explanations were vain. The police were called out and martial law contemplated. "Every hing looked mightily like insurrection" (this was in Trinidad), "the egroes flocked to town and would not return to their masters, so that he magistrates were compelled to exert the power vested in them, and ake some examples by having corporal punishment inflicted on a ew of the strong and refractory men, which had the desired effect, and he apprentices returned to the estates."

However, slavery has ceased and apprenticeship has ceased, at least or the original blacks, and fifteen years have passed. We naturally esire to know the result of the experiment. It has surely had sufficient time to work. It has been tried under the most favorable auspices. Other nations have an interest in these results. France has, because her revolutionary government is on the eve of a similar movement. The United States have, for we have near 3.000.000 slaves; nd some very wise and very humane men are ever urging us to set hem free, to rove untrammeled as they wist, over the wealthiest states f the Union. These gentlemen cannot, of course, object to our pointing to their own bantlings, emancipation and Hayti, in the West Indies, and receiving instruction from that quarter. It is but fair, too, hat British writers should speak, whose prejudices would naturally nduce them to give the most favorable account, even if there were American authorities to consult. On so interesting a point, the reader will pardon our frequent and extended quotations. And first from he work of Col. Capadose, who was an officer sixteen years in the slands, published in London, 1845. We ought also to observe, that he writer is a great advocate for emancipation and the negroes.

"The greatest drawback to agriculture, in the West Indies, is the idleness of the egroes, who work only four hours in the day, and then (notwithstanding the igh wages they receive) very negligently; three-quarters of a dollar each per iem, or rather for four hours superficial work, besides other advantages equivalent o one dollar, is what is usually paid to them. Many will not work at all so long s they have any money, and, upon the slightest word of reproach, quit the estate orever. My friends were in great anxiety, lest, through the misconduct of these illful laborers, the crops of this year should be lost; and, as every month increases heir insolence, there was a worse prospect for the future."—Vol. i, 29.

"I could not see the machinery in operation, as nearly all the work people had eft in consequence of a slight reprimand he had given them, for impertinence and isrespect to the gentleman, his assistant, who, being disturbed one night by their oisterous singing, dancing and noisy music, mildly requested them to go to a reater distance from his lodging. Instead of complying with his reasonable request, they told him he might go and sleep at the mill, for they should not move to please him," &c., &c.—Vol. i, 35.

"They (the negroes) are too indolent for so important an object; for, whilst they possess lands capable of enriching them in the highest degree, they simply cultivate what they require for present support—a small quantity of rice, cocoa, coffee, Indian corn, ground provisions, and some few of the tropical fruits. With property abounding with the finest trees and materials, their cottages are poor looking, miserable dwellings."—Vol, i, 39.

"The whole way I passed cocoa and coffee grounds, but not in good order, and offering a gloomy illustration of what I had observed in the sugar estates, viz., the want of proper workmen. In these plantations it is the more extraordinary, as the labor is so light that children are capable of performing it; but the weeds are suffered to grow to a great height—even the gathering the fruit is scarcely performed, a greater part being allowed to drop to the ground. Every thing offers a cheerless contrast to the former flourishing state of the colony," &c., &c.—Vol. i, 45.

"But what a contrast was offered by the valley of Diego Martin; the estates looked abandoned, and the luxuriant cocoa, coffee and sugar, which formerly gave so much beauty to the landscape, were no longer seen; long brushwood had taken their place and everything wore a neglected aspect."—Vol. i, 80.

In relation to the negroes, Col. Capadose says:

"It is deeply to be regretted that the emancipated, and the people, generally, in the colonies, are averse to agricultural labor, and that the comparatively few who do engage in it, are so unreasonable in their demands. It is equally to be lamented, that the free born rising generation seem absolutely disinclined to any pursuits of that nature, even the cultivation of gardens."—Vol. ii, 250.*

The present value of estates:

"It is affirmed that very few proprietors of estates, in the West India Colonies, now clear the expenses attendant on their cultivation; yet, in some of them, such as Tobago, Dominica, Grenada, and others, the wages paid to laborers amount to less than what the maintenance, in all probability, of a similar number of slaves would have cost before the emancipation. The loss to proprietors in those colonies must, then, arise from the difference of labor performed from its present insufficiency—whilst the laborers have an easy mode of indemnifying themselves for the lowness of wages by the sale of their ground provisions, on which they can put what price they please."—Vol. ii, 255.

An able writer, in the February number of Blackwood, 1848, paints in most fearful colors, the condition of the West Indies:

"Immediately after the emancipation act was passed, the produce of the West Indian estates began rapidly to decline, and their value to be correspondingly depreciated. This was the inevitable consequence of the abridgment of the working hours, and of the withdrawal of a great number of laborers altogether from plantation employment. In fact, the want of adequate labor began to be felt most painfully throughout the colonies. Notwithstanding this, the planters went on, making every exertion they could, under peculiarly difficult circumstances.

"The increased expense, occasioned by the altered circumstances of the colonies, soon absorbed more than the compensation money which they had received; and in addition they were urged by government to provide "more fully for the administration of justice, for the consolidation of the criminal law, for establishing circuit courts, amending the workhouse laws, improving the state of jails, for better prison discipline, establishing weekly courts of petit sessions, providing places of confinement for prisoners, raising an efficient police, &c.—things no doubt, very desirable in themselves, but not to be accomplished save at a grievous cost, which, of course, was thrown entirely upon the shoulders of the planters. The following extract from the answer of the Jamaica Assembly, in reply to the Governor's address, at the opening of that chamber on 4th August, 1835, will show the state of the colonies at the close of the year immediately subsequent to emancipation: 'Seeing large portions of our neglected cane-fields becoming overrun with weeds, and a still larger portion of our pasture lands returning to a state of nature; seeing, in fact, desolation already overspreading the face of the land, it is impossible for us, without abandoning the evidence of our own senses, to entertain favorable anticipations, or to divest ourselves of the painful conviction, that progressive and rapid deterioration of property will continue to keep pace with the apprenticeship, and that its termination must (unless strong preventive measures be applied) complete the ruin of the colony.'

"The following were the immediate and extremely natural consequences: 'There was no violence; the mass of the laboring population being left in quiet possession of the houses and grounds on the estates of their masters. For successive weeks universal idleness reigned over the whole island. The plantation cattle, deserted by their keepers, ranged at large through the growing crops, and fields of cane, cultivated at great cost, rotted upon the ground for want of hands to cut them. Among the humbler classes of society, respectable families, whose sole dependence had been a few slaves, had to perform for themselves the most menial of-fees. Still the same baneful influence continued to rule the Government. In all cases of difference the stipendiary magistrates supported the emancipated mass against the helpless proprietor, and even took an active part in supporting the demands of the people for an extravagant rate of wages, alike injurious to both classes.'

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* Col. Capadose does, in several places, speak of the contentment of the negroes, and possession of physical comforts; but he is forced, at the same time, to throw himself upon the *name* of freedom, so dear; as he admits that they were "comfortable, happy and well taken care of in every way, when slaves."

"*To the Editor of the Jamaica Despatch, Chronicle, and Gazette.*

"'Coming events cast their shadows before.'

"SIR—I have just returned from Lucea, where I have witnessed a sight any thing but gratifying to my feelings.

"A vessel has arrived from 'Trinidad de Cuba,' to load with the mill and machinery, coppers, and other apparatus from Williamsfield Estate in this parish, late the property of Mr. Alexander Grant. The estate has, since Mr. Grant's death, been, from the difficulty of the times, abandoned; and Mr. D'Castro, the owner of the vessel now at Lucea, has purchased the fixtures for an estate settling in Cuba.

"Is not the fate of Jamaica estates foreshadowed in this circumstance? Is it not a melancholy reflection that we are being wantonly sacrificed by our fellow-countrymen, solely for the agrandisement of foreigners!

"It does not require, Mr. Editor, a prophet to foretell the fate of Jamaica sugar properties, and that for every man's property destroyed here, half a dozen will flourish in Cuba. A new branch of trade is opened to us, and, for a few months, no doubt, it will be a brisk one. I would strongly recommend gentlemen who are advertising properties for sale to send the advertisement to Cuba; an estate now is not worth more than the cattle and machinery on it, and our neighbors in Cuba might obtain all the machinery necessary for the settlement of their sugar plantations on very easy terms; and it will be, no doubt, exceedingly agreeable, at some future time, when necessity compels us to quit our own country, to seek a living in Cuba, to see our late still, steam-engine, or coppers, and if we are particularly fortunate, obtain the superintendence of any one of them. I am, Mr. Editor, your obedient servant. A PROPRIETOR.

"Hanover, Oct. 23, 1847."

"The destructive results to property, by the changes thus precipitately forced on the colony, will be best manifested by reference to the exports of our three great staples—sugar, rum, and coffee:

	HHDS. SUGAR. at £20.	PUNCH. RUM. at £10.	LBS. COFFEE AT 60s per 100 lbs.	ANNUAL VAL. £.
Average of the five years ending 1807, last of the African trade	131.962	50.462	23.625.377	3.852.621
Average of the five years ending 1815, date of Registry Act....	118.490	48.726	24.394.790	3.588.903
Av. of the five years ending 1823, date of Canning's Resolutions..	110.924	41.046	18.792.909	3.192.637
Average of the five years ending 1833, last five of slavery.....	95.353	35.505	17.645.602	2.791.478
Average of the five years ending 1843, first five of freedom....	42.453	14,185	7.412.498	1.213.284

"Up to 1807, the exports of Jamaica progressively rose as cultivation was extended. From that date they have been gradually sinking; but we more especially entreat attention to the evidence here adduced of the effect of emancipation, which in ten years, reduced the annual value of the three principal staples from £2.791.-478, to £1.213.284, being in the proportion of seven to sixteen, or equal, at five per cent., to an investment of about thirty-two millions of property annihilated. We believe the history of the world would be searched in vain for any parallel case of oppression, perpetrated by a civilized government, upon any section of its own subjects.

"In other places the alteration and decline has been even more startling. The following table exhibits the state of exports from British Guaiana, at intervals of three years, beginning with 1827, and ending as above with 1843:

YEAR.	SUGAR. hhds.	RUM. puncheons.	MOLASSES casks.	COTTON. bales.	COFFEE. lbs. Dutch.
1827.........	71.168	22.362	28.226	15.904	8.063.752
1830.........	69.717	32.939	21.189	5.423	9.502.756

1833.........	63.415	17.824	44.508	3.699	5.704.[illegible]
1836.........	57.142	24.202	37.088	3.196	4.801.[illegible]
1839.........	38.491	16.070	12.134	1.364	1.583.[illegible]
1843.........	35.738	8.296	24.937	24	1.428.[illegible]

These, then, at first blush, are the fruits which have been abundantly reaped, and there is little to hope for in the future, despite of all the efforts which the returning reason of the mother country annually puts forth. To us, it is too plainly manifest, the doom of the British West Indies is irrevocably sealed.

The Hon. John C. Calhoun, when Secretary of State, in 1844, dispatched, we believe, a private agent to the West Indies, in quest of information for the department, and with the results before him, produced that celebrated letter to Mr. King, which did so much in opening the eyes of France and other nations. The strong yet truthful colors in which the condition of the colonies are developed, warrants an extract in our pages.

"The experiment, &c., has turned out to be a costly one. She has expended nearly one hundred millions of dollars in indemnifying the owners of the emancipated slaves. It has been estimated that the increased price paid since, by the people of Great Britain, for sugar and other tropical productions, in consequence of the measure, is equal to half that sum; and that twice that amount has been expended in the suppression of the slave trade—making together, two hundred and fifty millions of dollars as the expense of the experiment. Instead of realizing her hope, the result has been a sad disappointment. Her tropical products have fallen off to a vast amount. Instead of supplying her own wants and those of nearly all Europe, with them, as formerly, she has now, in some of the most important articles, scarcely enough to supply her own. What is worse, her own colonies are actually consuming sugar produced by slave labor, brought direct to England, or refined in bond, and exported and sold in her colonies as cheap, or cheaper, than they can be produced there; while the slave trade, instead of diminishing, has, in fact, been carried on to a greater extent than ever. So disastrous has been the result, that her fixed capital vested in tropical possessions, estimated at the value of near five hundred millions of dollars, is said to stand on the brink of ruin.

"But this is not the worst. While this costly scheme has had such ruinous effects upon the tropical productions of Great Britain, it has given a powerful stimulus, followed by a corresponding increase of products, to those countries which have had the good sense to shun her example. There has been, it is estimated by them, invested in the production of tropical products, since 1808, in fixed capital, nearly one thousand millions of dollars, wholly dependent on slave labor. In the same period the value of their products is estimated to have risen from about $72.000.000 annually, to nearly $220.000.000, while the whole of the fixed capital of Great Britain vested in cultivating tropical products, both in the East and West Indies, is estimated only at about $830.000.000, and the value of the products annually, [illegible] 0.000. To present a still more striking view: of three articles of [illegible] products—sugar, coffee, and cotton—the British possessions, including the [illegible] East Indies, and Mauritius, produced, in 1842, of sugar, only 3.993.771 [illegible] Cuba, Brazil, and the United States, excluding other countries having [illegible], produced 9.600.000 pounds; of coffee, the British possessions [illegible] 393.003 pounds, while Cuba and Brazil produced 201.595.125 [illegible] cotton, the British possessions, including shipments to China, only [illegible], while the United States alone produced 790.479.275 pounds."

[illegible] 1844.

[illegible] little into the details of these emancipation movements. [illegible], the necessary sequence, demanded by the condi[illegible]—protests upon protests, petitions upon petitions, [illegible] Parliament, and reports, navigation and tariff laws, crimination and recrimination, by parties and ministers, in one continued, uninterrupted series.

The colonists deserve the fate they have suffered. They were deluded with open eyes into an assent to a scheme which they at least should have known to be impracticable. The alluring promises so liberally made, have not been kept. Indeed, no government could be supposed absurd enough to keep them, if it had the power. There is a point beyond which men will not endure *taxation*, and they are reaching it. Let the colonist partake of the bitter fruits of *his* fanaticism without complaint. He could have averted the evil. He should have placed his foot upon the imprescriptible rights of a British subject, and resisted the encroachment. *Magna Charta* and the constitution of Parliament were the bulwarks of his *property* as his *person*. The power was his to have defied and resisted, even unto death. We admit the difficulties of the position, but he should have been firm and unmoved. To him the negro's character was familiar; and let us ask, what slaveholder of South Carolina, Mississippi, or Louisiana, even if ignorant of the results in the West Indies, would hesitate a moment about the availability of *free* black labor in any department of tropical agriculture? We shall see, now, the same confessions wrung from British lips. The extract is from Blackwood, for February, 1848:

> "The negro is more fully alive, perhaps, than any other class of mankind, to the luxury of undisturbed idleness. He has few wants, and those few are easily supplied in such a splendid island as Jamaica, where his provision ground, with the smallest possible amount of cultivation, will afford him the necessaries and some of the luxuries of life. What he cannot raise for himself, must of course be obtained by labor; but a very slight portion, indeed, of the primal curse now lights upon the emancipated negro, who has no ambition, and, consequently, no motive to persevere.
>
> "It has been perfectly well ascertained, that the constitution of Europeans will not admit of their pursuing out-door labor in a tropical climate; and, therefore, white labor is out of the question. The natives of Madeira, indeed, have been tried, but they are unfit for the work; and even were it otherwise, the supply from that quarter is limited. Coolies were brought out from the East Indies at an enormous expense, equal to two-fifths of their wages, for a period of five years. It is well known, that of the last lots of Portuguese and Coolies (those of 1845–6), nearly one-half have been, since that period, on the sick list, most of them not seriously ill, but in that feeble and inert state which change of climate is apt to produce.
>
> "From all this, and from the experience of centuries, it is evident, that the African alone is physically suited to undergo with ease and without danger, the fatigue of field labor in the climates which are suited for sugar cultivation. We shall presently allude to the obstacles which have been thrown in the way of obtaining a supply of free labor from that quarter; and we think we shall be able to convince the most scrupulous reader, that the line of conduct adopted by the pseudo-friends of the African, is one most admirably calculated to foster the state of barbarism, cruelty, ignorance, oppression and crime, which is the melancholy characteristic of the inhabitants of that unhappy country."

Let these stubborn facts rebuke the presumptuous interference of those in certain sections of our own Union, with the institutions of other sections, about which they are practically as ignorant as was the British nation of the character of the people they set loose upon the world. Shall the momentous experiment, made under such auspicious circumstances, result less disastrously when made under circumstances infinitely more unfavorable? The negro, by nature, is fierce and ungovernable, and submits to exertion under pressure only of the greatest exigencies or constraint. His aspirations are gross and sensual.

Satisfy these, and he will bask in the sun, and doze away life in stupid insensibility. To suppose such a people capable of self-government, and of accommodating themselves to all the regulations and duties of a civilized state of society, is a monstrous assumption.

One act of palpable iniquity is brought home upon the British government. After forming a solemn compact with the master, to allow him *six* years of labor, termed *apprenticeship*, in his slave, and a certain sum of money, in consideration of his after freedom, the parliament of England, in its infinite highness, undertook to dissolve this compact by abridging to *four years* the service of the negro! But

> "The way found prosperous once,
> Induces best to hope of like success."

Among the earliest complaints of the planters were, that they were neglected by the home government; that no facilities were afforded for the introduction of apprentices [?] from Africa or the East Indies; but, on the contrary, impediments imposed. The last complaint amounts to this—contracts made with such apprentices in their native country are of no force. They must be made in the colony; this is plain. A contract made with a barbarian, in his native wilds, would have few points in the barbarian's favor. He understands equally well, the title of slave and apprentice!

These complaints were disregarded, and the planters allowed the full protection for their products, enjoyed up to 1834, viz.: a differential duty of twenty-one shillings per cwt., imposed in their favor, upon all sugars imported into England from foreign countries.* For this much they were to submit to the following restrictions. We extract from the *London Economist:*

> "1st, They were confined to the British markets for their supplies of lumber, food and clothing; 2dly, They were prevented importing fresh labor, under what we always deemed an unworthy suspicion—that immigration would degenerate into a slave trade, and immigrant labor into slavery; 3dly, They were precluded the privilege of sending their produce to Europe in any but British ships, which not unfrequently entailed an extra cost of two to three pounds a ton upon their sugar; 4thly, And at home, out of regard to the landed interest, their rum was subjected to a high discriminating duty in favor of British-made spirits, and their sugar and molasses were entirely excluded from our breweries and distilleries."

In 1844 an innovation was made, by rendering the duty dependent entirely upon the place of growth, viz.: in *free* or *slave* countries. In 1846 this distinction was entirely abrogated, and a scale adopted for the final and early introduction of all sugars, upon a common footing; a measure of whig policy, induced by the growing popularity of free trade doctrines. The differential duty for 1846, was six shillings per cwt.; in 1850 it is to be *nothing*.

The effect of this tariff arrangement has been, as stated by Mr. Calhoun, to stimulate, in an extraordinary degree, the growth of slave sugar; which, in Cuba, within a few years, from 60.000 per annum, has swelled to over 200.000 tons. The same may be remarked of Louisiana and other countries. This competition must be met by the British colonies, with all the fetters of their navigation laws. They are even hold that Havana sugars are worth five shillings the hundred more in point of color and strength, growing out of superior working.

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* Thus the duty on colonial sugar was £1 4s.; on foreign, £3 3s.

A writer in Blackwood gives some interesting statistics of the cost of producing sugar in the different islands:

> "'From many calculations,' writes a highly intelligent and experienced correspondent, 'the lowest rate at which sugar *can* be produced, is about twenty shillings per cwt., on the average, or twenty pounds per ton. No doubt some estates may, and do, grow it cheaper than others. They may have advantages of situation, both in regard to weather and command of labor; but one thing I am certain of, that no number of estates taken collectively, can grow it much under twelve shillings.'

Cost of production in slave countries, per ton	£12	0	0
Add duty £1 per cwt.	20	0	0
Cost, irrespective of freight	£32	0	0
Cost of production in free labor colonies	£20	0	0
Add duty 14*s.* per cwt.	14	0	0
Difference of value between slave and free sugar, at the lowest estimate, or 3*s.* per cwt.	3	0	0
Cost, irrespective of freight	£37	0	0

The following statistics show the depreciation in value of a few leading estates:

> "In 1838, the value of the estates, owing to the want of labor, had fallen from one-third to a half. The following is the account of some of the estates:

	Price in 1838.	*Former price.*
Anna Catherina estate	£30.000	£50.000
Providence	38.000	80.000
Thomas	20.000	40.000

> In 1840, the depreciation became greater. Here are a few examples:

Rome and Houston estate	£40.000	£100.000
Success	30.000	55.000
Kitty	26.000	60.000
William	18.000	40.000

> "In 1844, the Groenveldt estate, formerly valued at £35.000, was sold for £10.000. In 1845, the Baillie's Hope estate, formerly valued at £50.000, was disposed of for £7.000. And in 1846, the Haarlem estate went for £3.500, whereas its previous value was not less than £50.000."

The cry of the planters is now for higher protection, and it resounds every where in the colonies and with terrific force in parliament. Ten shillings on the cwt. of sugar is the lowest amount which they consider consistent with the further existence of the colonies! Will their demands be met? For the interests of sound government we hope not.

What right have the planters to expect a restoration of the old sugar duties and even higher ones, with all the support of the high friends they have in England? Shall the power of taxation be given to *them*? Were the government of Lord John Russel to make a sudden sommerset and find itself supported in the popular sympathies of England, a thing almost impossible, it might be considered an act of *magnificent benevolence*, upon the part of a *generous* nation, submitting itself to onerous taxation; never an act of *justice* accorded to whom it was *due!* Does it not involve an absurdity to suppose that in the compact with the slave owner he was to be allowed *forever* afterward to dispose of his products in the London markets at much higher, even, *double* their true valuation, as regulated by supply and demand throughout the world? We say *forever*—for, if with nearly twenty years of protection under the emancipation, he has been sinking lower and lower, when in the name of heaven will he be able to stand alone? Is it not a vain struggle against the power of nature and circumstances? The monstrous folly of submitting *forever* to such an outrage upon trade and enterprise, could not for a moment have entered the minds of the English people, however deluded in other respects—an outrage without equivalent—unmitigated wrong—support to a tottering and baseless fabric!

But we have no time to continue any further our asseverations here, but must pass to concluding sections of the article.

4. DEPENDENCIES OF HOLLAND.—The three islands of Saint Eustatia and its dependencies, Saba, St. Martin and Curacoa, are the property of the Dutch, who have never made any considerable figure in the western world.

Saint Eustatia is in circumference thirty miles, and has an area of one hundred and ninety square miles. Its appearance from the sea is that of a conical mountain, though much of its surface is level and covered with vegetation. Tobacco is an important product, but sugar, cotton, indigo, provisions and stock, are exported. Having been the center of immense contraband trade during the war, Admiral Rodney is said to have taken with the island £4.000.000 booty. The commerce and prosperity of St. Eustatia have declined. The product of sugar now is only about 1.000 barrels, and the population has decreased from five thousand whites and fifteen thousand slaves, to three or four hundred whites and about two thousand slaves. *Saba* is altogether unimportant. The island was settled by the Dutch. in 1635; it has since changed hands with France and England, and finally given to Holland, in 1814.

Saint Martin.—This island was originally settled by the French and Dutch, and is divided between them—the French part being attached to Guadaloupe and embracing a population of six hundred free, and three thousand slaves. The Dutch population is about equally numerous. They each produce about 25.000 cwt. of sugar, and 130.000 galls. of rum. The whole area of St. Martin is only thirty square miles. Salt is largely produced.

Curacoa, the largest of the Dutch islands, contains an area of eight hundred square miles and thirteen thousand five hundred inhabitants, of whom three thousand are white, five thousand five hundred free colored, and five thousand slaves. Sugar and salt are the great staples. Its capital is Williamstadt, a well built town, governed by a stadtholder. The English had possession in 1807. In common with all the Dutch colonies, the expenses are much greater than the revenue.

The Dutch have, also, a portion of *Guaiana*, on the South American coast, called *Surinam*, from the name of its capital. There are one thousand and fifty estates of sugar, cotton, coffee, indigo, cocoa, &c. It is said that the government in Holland, in 1842, appointed a commission to determine the best mode of extinguishing the institution of slavery in the colonies; and the governor told Col. Capadose, in 1845, the only thing that prevented the Dutch government from acting, was the want of means to compensate the great losses which would result to the planters. The population, in 1840, was 9.475 free, 46.906 slaves, and 6.300 friendly bush negroes. Export, 1841:

Sugar	31.386.646	lbs.
Coffee	1.958.840	"
Cotton	1.467.070	"
Molasses	1.020.258	galls.
Rum	82.374	" &c., &c.

5. DEPENDENCIES OF DENMARK.—*St. Thomas* was settled by the Danes, in 1672, and contains thirty-seven square miles. The soil is not productive, and sugar and cotton but little cultivated. Population, five hundred whites, one thousand five hundred free, five thousand slaves. The island was twice in the hands of Britain. Its chief town is a place of great activity and spreads over considerable extent. "Vessels from all parts are seen in the harbor, persons of all nations in the streets, and languages of every kind heard in the hotels and public places." Population by one account 12.000. "The real history of the island," says a writer in *Colonial Magazine*, "is unwritten; but that it has been the scene of more atrocities, and the refuge for more outlaws than any other ocean isle, is certain." The sales of merchandise in St. Thomas are vast. Goods are landed duty free, which enables it to command the trade of the islands and of South America. The slave trade is carried on here. "Long, low, black schooners," says an English account, "were notoriously fitted out in this harbor, within the present century, but these vessels had secret owners, accessories and agents here, while their bloody flag infested these seas."

IMPORTS OF ST. THOMAS, 1840.

From Great Britain	$2.110.000
" France	640.000
" Hamburg, &c	960.000
" Bremen	199.000
" United States	968.000
" Other places	133.000
	$4.997.000

Spanish, American, and West India arrivals, in 1840, 1.568 vessels; 48.024 tonnage.

Santa Cruz.—From a sketch by Thurlow Weed, we learn that the English and Dutch took possession in 1625; that the latter were expelled in 1649, and the former destroyed by the Spaniards the following year. The French again received possession in 1761, but transferred it in 1653 to the "Knights of Malta." The French abandoned the island in 1720, for St. Domingo, but returned again and sold it to the Copenhagen merchants for £30.750, who sold it to the king of Denmark. The English in 1801 and 1807 seized upon the island. Its area is eighty miles. Population in 1841, 3.200 whites, 30.000 slaves. The product of sugar, coffee, cotton, and indigo have declined. In 1800 there were produced 40.000 hhds. sugar, and 20.000 puncheons rum; in 1846 about 20.000 hhds. sugar, and 14.000 puncheons rum. Christianstoed is the principal town and has five thousand inhabitants. The English language is mostly in use. The island, in common with the others, is under a governor general. The code of Christian V. is in force. The slaves in all the Danish colonies are in course of gradual emancipation.

Saint John is the remaining Danish island, and is thirteen miles long and six broad. It is unimportant.

6. Dependency of Sweden.—*St. Bartholomew.*—Area twenty-five square miles; population six thousand blacks, two thousand whites. It is abundantly fertile in sugar, cotton, tobacco, &c., &c., &c.

7. Hayti.—Notwithstanding the contrary desire, we must be content with a brief reference to Hayti, which, indeed, furnishes in its history, the materials for whole volumes. The world has seen with astonishment, and we trust with profit, the crimes which have been committed, and the ruin which has resulted, in a land once blessed with sound government and unexampled prosperity. We doubt if history presents any parallel, where the sanctions of freedom and independence have been given for so long a period, to a reign of guilt, terror, and devastation. Fearful is the responsibility of those who applied the incendiary torch to such materials.

The area of Hayti is 29.500 square miles, and its population about 700.000, of which, one-tenth part only are whites and colored. One-half of the island came into possession of France in 1691, by cession from Spain.

Unexampled prosperity crowned the efforts of the French in the island, up to that period, when the convulsions at home, induced by the revolution of 1790, began to extend their influences. The assembly in Paris proclaimed "universal freedom," and the blacks in the colony caught up the cry, and prepared for the dreadful orgies of blood.

The world has been abundantly satisfied, that all the horrors of the insurrection which ensued, are attributable to the fanaticism of the popular leaders in France, sustained by certain abolition societies in England, and the irresolution and mistaken policy of the colonial authorities in the island. But for these, the negro had remained content and happy, and mankind been spared the dreadful drama enacted by him.

We may, at some other time, go into the minutiæ of these movements, and furnish the reader an unvarnished narrative. The picture should ever be present in the minds of the south and of the north, that our country may be spared the repetition of the tithe only of these crimes. There is something terrible, if we judge from its fruits, in the very title, *amis des noirs*, "friends of the blacks," by whomsoever worn. The zeal and sincerity, yet indiscretion of these men, lead them to rush on where angels might hesitate a step. Well might even the negro himself pray to be saved, harmless, from his friends. Hereafter, when we speak of Hayti, we shall refer, with full particulars, to all the movements in behalf of the African—*Siera Leone* and *Liberia, colonization* and *abolition*—and exhibit them in their true colors.

We pass over the tumultuous and revolutionary history of Hayti, since its independence, down to the present moment, when conflicting armies are in the field, and the catalogue of crimes in the annals of Desalines, Christophe, Petion, and Boyer, successive presidents and despots.

The following table shows more than all language can, the decline and fall of Hayti:

EXPORTS FROM HAYTI, 1789, 1801—1841.

	Clayed Sugar. lbs.	*Muscovado.* lbs.	*Coffee.* lbs.	*Cotton.* lbs.
...	47.516.531	93.573.300	76.835.219	7.004.274
...	16.540	18.518.572	43.420.470	2.480.340
...	198	5.443.567	26.065.200	474.118
...	157	3.790.143	29.240.919	216.103
...	2.787	2.514.502	35.137.759	346.839
...		600.934	29.925.951	820.563
...		200.454	24.235.372	592.368
...		14.920	33.802.837	332.266
...		5.106	44.269.084	1.028.045
...		2.020	36.034.800	815.697
...		32.864	32.189.784	629.972
...		1.097	48.352.371	
...		16.199	37.662.674	
...			30.845.400	
...		741	46.126.272	922.575
...		1.363	34.114.717	1.591.454

oes Mr. McGreggor remark, and with this we close: "What y of Hayti may be, we will not attempt to determine, further revolutions of 1842, 3, 4, 5, and 6—the expulsion of Presi- r—the atrocities committed by the negroes on the colored e contests and distractions between the former political men nd—the insecurity which prevails—the non-payment of the ts of indemnity to France—the neglect of agriculture—the t want of products for trade, and the lax morals and indo- he population, are all subjects, when deliberately considered, t leave us much good to hope for, in the prospects of Hayti."*

Population of the United States.—We take the follow- the Mercantile Times, New York:

> tes which have received German immigrants, and to which they have ed character, are, Pennsylvania and Ohio, where about one-third are of gin; western New York, about one-fourth; Indiana, Illinois, and Mich- one-fifth; and Missouri, Iowa, and Wisconsin, toward which latter ide is now pressing, large numbers of Norwegians mingling in.

Raumer makes the German population of the United States ly larger than the above estimate. We subjoin it. He

0.000 inhabitants, 4.886.000 were in the year 1844, Germans, viz.:

lvania,	880.000	out of	1.938.000	inhabitants.
	764.000		1.784.000	
ork,	527.000		2.641.000	
a,	309.000		783.000	
ssee,	281.000		721.000	
,	265.000		633.000	
s,	3.037.000		8.730.000	

mber is increasing with greater rapidity now than at any former period. ht of leaving the fatherland, to seek a new star of fortune across the once sent a pang to the German heart, has now become so much an atter, that thousands follow thousands in a constant stream."

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ader will, by reference to Vols. 1, 2, 3 and 4 of Commercial Review, dditional information on the West Indies.

HAVANA, April 19, 1848.

J. D. B. DE BOW, ESQ.

Dear Sir:—Agreeably to my promise I am doing my best to collect all the data required to give you a fair comparative statement of sugar making, in this island and in Louisiana by the old set of kettles, and by the other methods, and which I shall communicate upon my return.

The present average price of negroes in the Island of Cuba, is $500 round—good plantation hands bring $600, and such for the last twelve months have never been lower than $408. The slave trade is so much suppressed that the sugar planters here have now to buy city servants through negro brokers, or to buy coffee estates with the slaves upon them. About a fortnight ago a coffee estate with 35 negroes, say 22 good hands and 13 old and children, was sold at $20,000,—payable one half cash, the other half in first rate Havana commercial acceptances, at 6 months, with interest. The slaves have been removed to the sugar estate of the buyer, and he has offered the coffee estate, from which only the slaves have been removed, for $3000, but has not as yet had an offer as high as $2500. If he could obtain this price for the land, the slaves would then stand him at $17,000 equal to $500 round.

The following statement of a plantation managed in the most saving manner, has been furnished to me, and which shows that the annual expenses of a sugar plantation in this island is greater than in Louisiana.

The estate is near the shipping port, on rich, new bottom land. There are in cane 260 acres—in plantain, corn, provisions and cattle peas, and occupied by buildings and roads 154 acres—in wood 919 acres—the whole 1333 acres—120 negroes—out of which 70 hands—50 yoke of oxen, carts, &c. The crop is

Sugar, 700 hhds. of 1580 lbs. each, 1,106,000 lbs. @ 2½ cts. in port,	$27,650 00
Packages, 700 @ $5 making, - - - - - - - -	3,500 00
Molasses, 350 hhds. of 140 gals. each, @ $5 on plantation, - -	1,750 00
	32,900 00

EXPENSES.

Salaries of Overseer, Engineer, Sugar Maker, and Assistant, Carpenter, Ox driver &c. - - - - - - -	2685	
Cost of hhds., transportation, loss in oxen, repairing buildings and Machinery. - - - - - - - -	6900	
Feeding, clothing, medical attendance, &c., for 120 negroes,	2439	12,022 00
		$20,878 00

NETT PROCEEDS.

The sugar is sold at 2.816 cts. on account of the extra charge for the hhds. To this price must be added the export duty, &c.

The yearly yield per hand is 15,800 lbs. of sugar, the average per head 9216 lbs.

The yearly expenses of each one of the 120 negroes is as follows, feeding $11 60, clothing $4 96, medical attendance and medicine $3 75, making in all $20 31.

700 hhds. or 1,106,000 lbs. kettle sugar, is the average yield of the said plantation—till now every year they could cut but two-thirds of the cane. The production is thus limited only by the grinding labor, and it is the case on every new sugar estate on the island. It is the same on our plantations with good new land. Here the grinding season lasts an average of five months, not six months as stated by some of your contributors, with us it lasts but two and a half months. I think 8000 lbs. a fair average yield per hand on our good land and well managed plantations having 60 to 80 hands, and using the common set of kettles. Therefore they make yearly in this island per hand twice as much as we do—and it is true they have twice as much time to do it, and I cannot see any grounds for their claim to superiority over our planters.

Your obedient servant.

N. RILLIEUX.

JOURNAL OF BANKING AND FINANCE.

No. I.—CHRONOLOGICAL HISTORY OF THE CURRENCY.

: persuaded we can render no more acceptable service to our readers than
ting to their attention the following able and accurate "Chronological
the principal events in British History relating to the Currency," taken
Westminster Review. The intimate connexion which exists between
sand various articles which contribute to the trade of a nation, and
nsequently to augment its wealth, is too clearly seen and universally
dged to require enforcement at our hands. Dependence is felt not only
nal relations which exist in a country, but also in the measure to which
ierce is enlarged. If then, one article of trade is dependent upon another
ice it maintains, and one country upon another for the greater cheap-
er of its food or clothing, how necessary is it that we should regard with
il eye the mainspring of trade, which is the currency. In the article
ch we subjoin, we are placed in possession of light through which the
ousand problems involved in the course of trade and operations of the
may receive a clear and ready solution.—EDITOR.

e of the precious metals, as money, was probably known in some parts
nd at an earlier period than the invasion of Julius Cæsar, through the
se kept up with Cornwall by commercial nations known to have visited
but it may be assumed that metallic *coins* were first introduced by the
On the departure of the Romans, and when the country was given up
il centuries to intestine divisions, we meet with, in the brief records of
occasional notices of the scarcity of money; and a species *of living money*
iid to have supplied the place of coin during a part of the Anglo-Saxon
Slaves (the *theowes* or *servi* of "Doomsday Book") and oxen passed cur-
e payment of debts. The price of a slave was four oxen. The export
to Ireland (then in the hands of the Danes) was the chief feature of the
hester and Bristol. This was restricted, but not altogether abolished, by
ibout the year 1030.

he Conquest. The ancient *Tower pound* (11 oz. 5 dwts. troy) of fine
r, with 3 dwts. of alloy (seignorage), coined into 20*s*. by William the
man. Each shilling divided into twelve pence or *sterlings*. The same
em of coinage which had been introduced in France by Charlemagne.
reign gold coin in use at this period called a *Bezant*, ten of which were
it equal to the Tower pound of standard silver.
135.—Reign of Henry 1st. *Tallies* first mentioned in the statutes of this
a (c. 56), as a means of collecting the revenue.
he Pope's Nuncio having acquired great influence in England, through
veakness of King John's government, orders the "tenths" to be collected
oney instead of in kind. Payment exacted with great severity; and the
of interest raised by the usurers to 60 per cent.
old pennies coined by Henry III. A gold penny weighed two *sterlings*,
grs. troy. This was the first gold coin struck by English monarchs.
e middle or average price of the quarter of wheat, as gathered from the
f Henry III., regulating the assize of bread and ale, 10*s*. per quarter
. in shillings of the present weight and standard.*) The barons, during
reign. reproached Henry III. with pawning the credit of the Crown by
ng "*Tallies* for the victuals of his table."
Parliament called by Edward I, to restrain *usury*, and oblige all Jews to
r a badge.
wo hundred and eighty Jews hanged for clipping and coining.
he Jews banished the kingdom by Edward I.
ws were succeeded in their vocation of money-brokers by Italian mer-

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* Adam Smith, book 1. chapter xi.

chants from Lombardy, who resided in that part of the city which is still called after them *Lombard Street*, or the street of the Lombards. The stalls or benches at which their business was transacted gave rise to the term "bank," from the Italian *banco*, a bench. The Lombards were succeeded as private bankers or traders in money by the London goldsmiths; one of whom, Mr. Child, established about the time of the Restoration, the earliest of the modern banking firms still existing, that of Messrs. Child & Co., Temple Bar.

1336.—The exportation of English and Foreign coins prohibited by 9th Edward III., caps. 1, 9, 10, 11.

1337.—The Lombard money dealers accused of extortion, and their property seized and confiscated by a Royal commission.

1344.—Gold *florins* coined by Edward III.; but having been issued above their value, they were superseded the same year by a new gold coinage of *nobles*, *half nobles*, and *farthing nobles*. The *noble* was commanded to be a legal tender at 6s. 8*d*. (about 13s. 4*d*. in silver of the present *standard*, and about 24s. in silver at its present *value*.)

From this date till the year 1774, a *double standard* prevailed in England, silver and gold coins being both a legal tender; the silver coins at the price at which they were issued from the mint, the gold coins at prices fixed from time to time by royal proclamation, and governed by the market value of gold, as measured in silver.*

1349.—The *Tower pound* of standard silver, coined into 22s. 6*d*. by Edward III.

1350.—The middle price of wheat, by the "Statute of Laborers" (25th of Edward III.) 6s. 8*d*. per quarter, or 20s. in shillings of the present weight and standard.

1351 to 1464.—A Poll Tax of 4*d*. per head produces a popular insurrection, headed by Wat Tyler. Further debasement of the currency, in six successive coinages, by the last of which, under Edward IV., the *Tower pound* of standard silver was coined into 37s. 6*d*.

1382.—5th of Richard II. increases the penalties on the exportation of gold and silver coins.

1466.—5 Edward IV. The *Rial* coined, containing 5 dwts. of gold.

1489.—4th of Henry VII. increases the penalties on the exportation of coin to *double forfeiture*.

1490.—5 Henry VII. The first gold coin, called a *Sovereign*, issued at 20s. It contained 10 dwts. of gold;—our present sovereign contains 5 dwts. 3¼ grains.

1527.—The *pound troy* of 12 oz. substituted for the Tower pound of 11 oz. 5 dwts.: and the pound troy of standard silver coined by Henry VIII. into 40s. The *gold crown* coined containing 2 dwts. 9½ grs.

1528 to 1546.—Henry VIII. debases the *pound troy* of silver in the next four coinages by mixing it with 8 oz. of alloy and coining the pound troy, so composed, into 48 shillings. This was the most violent interference with the currency recorded in British history, as attempted during the lifetime of one Monarch. The *Sovereign*, in 1545, was reduced to 8 dwts. in gold. In 1546, the maximum of interest was fixed at 10 per cent., 37 Henry 8, c. 9; previous to which all interest had been considered usury by statute.

1547 to 1551.—In the next three coinages, the pound troy is further debased by Edward VI., and made to contain 9 oz. alloy, and coined into 72s.

This was the extreme point attained by the progressive adulteration of the coinage. The shilling of William the Norman, which had contained 266 grains of fine silver, *now contained only* 20 *grains;* a difference nearly as great as that between twelve pence and three farthings;† but we have to remember that *the real value*, or purchasing power over food and labor, of silver, had been progressively increasing up to this time, from the gradual discontinuance throughout Europe of the custom of payments *in kind*, and the consequent growing demand for money, which exceeded the average productiveness of the mines then worked. The average value, in other commodities, of *three farthings* in 1541, was about equal to that of *three pence* in 1066. Prior therefore to the reign of Henry VIII., the *depreciation* of the coinage by adulteration had not been nearly so great as the *appreciation* of the same quantity of fine silver by scarcity.

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* Lord Liverpool, 'Treatise on Coins.

† The particulars we have given of the coins are taken from the tables supplied in the 'Essays on Money, Exchanges,' &c., by Henry James.

The last mentioned debasement of the coinage was formally sanctioned by Parliament as a subsidy, "that the king might gain thereby £220,000," but limited, for this object, to the adulteration of 20,000 lbs. weight of silver bullion; but about the same time, the Parliament determined upon the equally impolitic measure, in an opposite extreme, of returning to the ancient standard to the extent at least of restoring the purity of the silver in the current coin.

1552.—The proportion of alloy to fine silver, reduced from 9 oz. to 19 dwts., and the pound troy coined into 60*s*. A commercial treaty concluded with Sweden, of which the conditions were made to depend upon the importation of bullion.
1553.—Edward the VI. dies (July 6th) in the 16th year of his age. A new coinage by Queen Mary of the same Mint standard as the last.
1554.—Philip of Spain, on his marriage with Mary, brings over with him 27 chests, 99 horse-loads, and two cart loads of gold and silver bullion; all subsequently spent in his foreign wars.
1555.—Growing scarcity of money. The Queen, this year, obliged to borrow of the merchants at Antwerp, £30,000, at 14 per cent. on the joint security of the corporation of London and her own. Average price of wheat for the three years, ending 1555, from Fleetwood's tables, quoted by Adam Smith, 8*s*. per quarter, in money of the present standard.

The change in the currency effected by the two last coinages of this period *quadrupled its value*. The shilling, which contained but 20 grains of pure silver in 1551, was now made to contain 88 grains. Its effect was of course to increase fourfold the burdens of rents, taxes, and every class of fixed obligations. Henry VIII. had cheated his creditors by paying them in base coin, but as his revenue was collected in base coin, he had practically lightened by it the burdens of the people; the well-intended measure of restoring the purity of the standard made them intolerable. This will be understood by the reader if he will imagine the consequences to himself of being called upon to pay his assessed taxes in sovereigns weighing each 20 dwts. 12 grs., instead of 5 dwts. 3 grs. Of course the demand for bullion would be quadrupled, as it was in Queen Mary's time; and from the increased cost of production, the coin would go abroad in remittances of payment, instead of goods, as it did then, and as it did again subsequently in the reign of William III. This explains the reason, why that cheapening of silver which resulted generally in Europe from the discovery of the mines of Potosi, in 1545, was not felt in England till the latter end of the reign of Elizabeth. The supply had increased, but not increased in England in the proportion of the artificial demand occasioned by raising the standard. Queen Mary was unpopular as a bigoted and persecuting Roman Catholic monarch, but from the first she was thrown into a false position with her subjects by causes of which neither she nor the historians of the time understood the operation. That operation, however, was far less severe than a similar measure would be in our own times, because in the reign of Mary our foreign trade was inconsiderable. The little commerce we had then was in the hands of merchants belonging to the Hanse Towns, meeting in the *Steel Yard*, and the entire revenue of England amounted but to £300,000.

1560.—The pound troy of silver, made to consist by the 2d of Elizabeth, of 11 oz. 2 dwts. of fine silver, and 18 dwts. of alloy, at which standard it has since remained. The pound troy so composed, coined by Elizabeth into 60*s*.
1562.—Wheat allowed to be exported by the 5th of Elizabeth when it reaches the price of 10*s*. per quarter, This low price quoted by Adam Smith, as an evidence of the contiued dearness of silver.
1571.—13th of Elizabeth, c. 8, confirms the 37th of Henry VIII., c. 9, fixing the maximum of interest at 10 per cent.
1580.—The Baltic Company formed. The first association of ***English*** merchants engaged in foreign trade.
1587.—Elizabeth defeats the Spanish Armada.
1597.—The privileges abolished of the Hanseatic merchants meeting in the Steel Yard.
1600.—The pound troy of standard silver coined by Elizabeth into 62*s*.

Subsequent coinages of the shilling have remained the same until the year 1816 when the *pound troy of* standard silver was coined into 64*s*.

1601.—The foundation of a systematic provision for the poor established by the 43d Elizabeth.

1603.—Elizabeth dies, and is succeeded by James I. The crown passing from the family of Tudor to that of Stewart.

1604.—Gunpowder plot.

1605.—The *Unity* Sovereign coined, containing 6 dwts. 11 grs. (The fourth change since 1545.)

1612.—The comparative cheapness of gold at this period not increasing relatively so fast as silver, gold rises 2*s*. per oz.

1620.—The *Laurel* Sovereign coined, containing 5 dwts. 20 grs. of gold. The average price of wheat for this year, and the twenty-five years preceding, 37s. for the quarter of eight bushels.*

1624.—The maximum of legal interest reduced from 10 to 8 per cent., by the 21st James I., c. 17.

Towards the close of the reign of Elizabeth, the influences upon prices began to be felt, of that vast and disproportionate supply of the precious metals, as compared with the demand, which resulted from the discovery and conquest of Peru. Subsequently, also, to the destruction of the Spanish Armada, England, and indeed the greater part of Europe, began to enjoy the blessings of a settled government, and with it came an expansion of credit, which, co-operating with an actual depreciation of gold and silver, but especially silver, all over the world, had, of course, a marked effect upon the nominal value of articles of merchandise, as measured by metallic coins.

Our readers will notice the falling rates of interest which commenced with this era of cheap money. David Hume and Adam Smith attribute these lower rates solely to increase of capital; contrary to the opinion of Locke, Law, and Montesquieu, who considered that the influx of the precious metals sufficiently accounted for the fact. We hold that the latter were right, although the two former had the best of the argument. David Hume and Adam Smith seem to have too hastily concluded, with some of our modern economists, that because money represents capital, therefore the demand for capital is always commensurate with the demand for money. A most serious mistake, as we have already endeavored to explain. *The demand for money depends upon the balances of trade.* Falling prices turn the scale in favor of money; rising prices turn the scale in favor of commodities. When, therefore, upon the influx of the treasures of South America, prices rose, and with them profits, the demand for money diminished; and diminishing in a more rapid ratio than its intrinsic value, in consequence of its place being supplied by the *money of account*, the result was shown in both a nominal and real reduction of interest. Let us repeat here what we may yet have to repeat again, that the test by which to discover whether a high rate of interest is or is not occasioned by a scarcity of capital, is a rise or fall of prices in reference to that kind of capital most imperatively required. If capital had been scarce when Queen Mary was borrowing money at 14 per cent., would the price of wheat have been 8s. per quarter? In the case before us, we see that with interest of money reduced to 8 per cent., the price of wheat had risen to 37s. per quarter.

1625.—James I. dies, and is succeeded by Charles I. Base money still continues to be issued for circulation in Ireland.

1636.—Average price of wheat at Windsor Market for the 16 years ending this year, 44*s*. per quarter.†

1640.—Charles I. having failed in his attempts to levy money without the consent of Parliament, and being refused an advance of £200,000 by the city of London, seizes, as a forced loan, £40,000 belonging to private merchants, deposited for safety in the Tower Mint.

1649.—Charles I. executed at Whitehall, (January 30.) The quantity of bullion coined during this reign, estimated at £12,096,220. A greater amount than was coined during the two reigns of Elizabeth and James.‡

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* 41*s*. 9*d*. for the Winchester quarter of nine bushels, by Windsor Market prices, quoted by Adam Smith.

† Fifty shillings per quarter of nine bushels.

‡ Wade's "British Chronology."

to 1659.—The Commonwealth and Protectorate of Cromwell. The Jews again permitted to settle in England. The maximum of legal interest reduced to 6 per cent. Average price of wheat for the ten years ending 1659, 45s. 9d. per quarter of eight bushels.

rom this period we may continue our chronological sketch at regular decen[illegible] intervals.

eriod of ten years. — Average price of Wheat per Qr. of 8 bushels. s. d.

60 to 1669.—Restoration of Charles II. (1660.) A return of exports and imports by Dr. Chas. D'Avenant, Inspector-general of Customs, (1662.)

Exports, £2,022,812. Imports, £4,016,019.

The public revenue for 1662 under £1,100,000. 1663. Gold imported from *Guinea*, and the *Guinea* Sovereign coined, containing 5 dwts. 9 grs. of gold; issued at 20s. Plague of London, 1665. Fire of London, 1666. The Dutch sail up the Medway, and burn our shipping, (1667) - - - - - - - - 44 9¼

70 to 1679.—Charles II., to obtain funds for the Dutch war, shuts up the Exchequer, (1672) seizing, as a permanent loan, £1,300,000, advanced upon the security of Exchequer *Tallies*, in anticipation of the revenue. *Panic in the city. Run upon the Goldsmiths*, the private bankers of the time, many of whom were compelled to stop payment. Ten thousand families said to have been ruined by this measure. The statute of 12 Car. II., cap. 13, of the same year, again fixes the maximum of legal interest at 6 per cent. - - - - 44 9

80 to 1689.—The penny post first set up by Mr. Murray, (1683.) Charles II. dies, and is succeeded by James II., 1685. James II. dethroned, and is succeeded by the Prince of Orange and Nassau, 1688. William III. conciliates the landed interest by granting a bounty of 5s per quarter on the exportation of wheat, (1689) - - - - 35 8

90 to 1699.—First years of bounty money on the exportation of wheat; seven years of extreme dearth, during part of which the bounty money was suspended; six years of a currency depreciated in value, by light weight, 25 per cent. Guineas sold at 30s. The Bank of England established in 1694. The old value of the shilling restored by a new coinage, 1695. Foreign coins allowed to be exported about the same time, on oath that they were *foreign*; and watches, sword hilts, &c., of silver manufacture. *Drain of bullion. Panic. Suspension of the Bank.* Exchequer Bills first issued as a substitute for Tallies: in this case limited to £3,000,000, and issued for small sums, to relieve the pressure. The amount still represented by *Tallies* in 169[illegible]2,544. - - - - - - - - 50 1

00 to 1709.—Years of an enhanced currency, government loans, and continued wars. The national debt raised by William III. from £664,263 to £16,394,701. Union with Scotland in the 5th year of Queen Anne, (1707.) Threatened invasion of the Pretender at the close of the same year. *Panic. Run upon the Bank. The Government helping it through its difficulties by guaranteeing for six months 6 per cent. interest upon* BANK *Bills*.* - - - - - 35 0¼

We have already explained at length the disastrous effects of the new coinage, producing an artificial scarcity of money and a falling market. These conse-uences would have been avoided but for the error of Locke, that "men in their argains contract not for denominations or sounds, but for intrinsic value." He iiled to perceive that intrinsic value can only be guessed at through the medium f denominations with which we are familiar, and that, therefore, when he raised e intrinsic value of the current coins, by which rents, taxes, wages, and prices ad been adjusted, he should have given his new shillings *new* names. It was an xcellent opportunity lost for issuing a *decimal* coinage.

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* Francis's "History of the Bank," vol. i., page 87.

Period of
Ten years.

Average price of
Wheat per Qr.
of 8 bushels.

s. d.

1710 to 1719.—Continental wars. Victories of Marlborough. National debt on the death of Anne, increased to £53,681,076. 12 Anne, c. 16, reduces the maximum of interest to 5 per cent. Accession of George I., 1714. The following year the Pretender proclaimed in Scotland and in the western counties of England. This was preceded by a *run upon the Bank, which lasted for several days without intermission.** The price of guineas (*guinea sovereigns*) fixed at 21*s*., 1717. The close of this period is memorable for the Mississippi and South Sea bubbles, which arose out of an universal expansion of credit when peace was secured abroad and at home. The Royal Exchange and other London Assurance Companies, founded at this time. The government enabled, in 1716, to effect a great reduction in the interest and principal of the national debt. - - - - - 43 5

1720 to 1729.—The reaction in October, 1720, of the South Sea, and other bubble speculations, produced a run upon the goldsmiths, many of whom, with the Sword Blade Company, that also acted as bankers, stopped payment. The Bank of England was again nearly swept away, but again weathered the storm. With the increased demand for money, all securities and every description of property fell in value. Trade was suspended, and the whole nation involved in suffering. It was about this time that the Bank adopted the resolution of maintaining a reserved fund, called "*the Rest*," to make good an occasional deficiency in the dividends to their own shareholders, and for extraoruinary contingencies. George I. dies 1727, and is succeeded by George II. - - - - - - - 37 4

BANK CIRCULATION.

1718	£1,829,930
1721	2,054,780

1730 to 1739.—Reign of George II. Peace throughout the first nine years of this period. War with Spain declared in 1739. - - 31 10

1740 to 1749.—Heavy losses by Spanish privateers. Hanoverian wars. War declared against France in 1744. Bank circulation £4,000,000. Charles Edward sails for Scotland, July 14th, 1745, gains two victories, and marches upon Derby, December 4th. *Panic. Run upon the Bank. The Bank obliged to pay in sixpences, and to block up the doors with its own friends, to gain time.* Charles Edward retreats from Derby the same week, and is finally defeated at Colloden, April 6th, 1746. Peace with France and Spain, by the treaty of Aix la Chapelle, proclaimed 1749. - - - - - - - - 31 8

Mr. Francis tells us of this period, that

"The day on which the news arrived that the rebels were at Derby, was known in London as Black Friday. The gates of the city were shut. The train bands were placed on duty night and day. The guards were ordered out. The Tower was closed before its time. The shops were unopened, and no business was done excepting at the Bank. Many of the inhabitants collected their valuables and fled from the country."

It was in the midst of a similar panic that Charles Edward had entered Edinburgh without a shot being fired. The retreat of his army, forced upon him by the Highland chiefs against his own bitter remonstrances, saved the crown by savng the Bank. The Highland chiefs did not know how much the principle of *immediate and absolute convertibility* would have befriended their cause. The stoppage of the Bank, that would have followed upon the next three days' march towards London, would have added such intensity to the demand for money, that no effective force could have been collected by the government, or long maintained. Yet, at this time, there were no notes in circulation under £20; and with

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* Francis's "History of the Bank," p. 90. † "History of the Bank," by J. M'Cay.

[illegible] then double standard, the bank had the option of paying either in gold or silver. We shall presently see what became, in a similar crisis, of the principle of immediate convertibility, when the Bank was required to pay in gold only.

Period of Ten years.		Average price of Wheat per Qr. of 8 bushels.	
		s.	d.
1750 to 1759.	—The 4 per cents. reduced to 3½, (1750.) The Bank lend government £1,400,000, at 3 per cent., (1752.) War declared against France, (1756.) The 3½ per cents. reduced to 3 per cent., (1757.) £10 and £15 bank notes first issued, (1759.) - - -	37	5
1760 to 1769.	—Bank circulation, 1761, £6,001,810. George II. dies, and is succeeded by George III., 1760. National debt, at the peace of 1762, £146,682,843. A commercial crisis at Amsterdam and Hamburg, and numerous bankruptcies in both cities. The pressure relieved by advances from England to solvent houses,* 1763. Dearth of corn, and distress from the high price of provisions, 1768. The first issue of *paper roubles* (3s. 3d.) by the Russian Government the same year.† The gold and silver coins having become deficient in weight, bullion rises in price. Gold sold at £4 2s. per oz., silver, 5s. 10d., 1769.‡ Average price of wheat for the last five years, 48s. 5d. per quarter, for the ten years. - - - - - -	41	4½
1770 to 1779.	—Continued bad harvests. At the close of 1772, the light coin called in, and re-issued at full weight. *Extensive failures and a monetary panic*, followed by a crisis still more severe on the continent, especially in Holland and France. The Bank at this period maintaining the convertibility of its notes by a loss, according to Adam Smith, of from 2½ to 3 per cent. for several years, on an average of £850,000 per annum, the amount of bullion it was compelled to purchase and get coined. (This was to meet the run upon the new heavy guineas, which went abroad, like the new shillings of William III., and for the same reason.) In the year 1774, were passed the coercion bills, with which originated the first war with our American colonies; and in the same session *the act for the adoption of a gold standard*, (14 George III., c. 42,) by which silver was disallowed as a legal tender for sums exceeding £25. Average harvests from 1775 to 1778, and an unusually abundant crop in 1779. Bank circulation same year, August 31, £7,276,540. - - - - -	49	0

The substitution of a gold standard for our ancient double standard of gold and silver, appears to have attracted little public attention, as a subject upon which few had thought, and therefore one upon which those who could talk learnedly were allowed to legislate in their own way. The reasons assigned for the change were the variations in the relative value of the two metals, and the practical inconvenience of having continually to adjust their relative prices. This was an argument for a single standard, although one which appears to us of very secondary importance, but not a reason for adopting the dearer metal as a standard rather than the cheaper. The argument for this was, that if the dearer metal were made to govern the price of the cheaper, there would be no variations in the relative price of either. The answer is, that although the variations would not be apparent, they would be as real as before; and that, as all experience proves that the tendency of silver is to fall in value relatively to gold, from a more rapid rate of increase, the change was certain to give to the creditor the advantage which had hitherto been enjoyed by the debtor, who, having had the choice of paying in silver or gold, of course paid with the metal most easily procured. But this is a point of but little moment, compared with the obvious fact that in choosing the dearer metal for our single standard, we necessarily augmented the chances of monetary disturbance. The proportion of value of silver to gold is as 1 to 15, but the proportion of *quantity* of silver to gold existing in the world is supposed to be as 50 to 1.* In the proportion, therefore, of 3½ to 1, the difference between a silver and a gold standard, and greatly beyond that by the difference between a single and a double standard, did we, in 1774, increase the disability of the nation to meet a new and sudden demand for metallic money, with an immediate and commensurate supply.

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* "History of the Bank," by Mr. Francis.

† Macpherson's "Annals of Commerce," iv. 8. The difference between the paper rouble and the silver rouble, was but 3 per cent. for nine years; but the subsequent unlimited issues of the Russian government during the war, reduced the paper rouble to one fourth only of the value of that of silver.

‡ Wade's "British Chronology."

Let it be understood—and it is important that this should be generally known—the principle adopted in 1774, of allowing nothing as a legal tender but the rarest and dearest of metals, was an entirely new rule of administration in the history of nations. The ancient Roman standard was copper;† and in modern times a tender of silver, or of either silver or gold, has been held by the common law of mankind to be a legal discharge of contract debts. We stand alone, with the exception of Portugal, as the only civilized community in the world that exacts from a debtor for every pound a prescribed weight of gold, even though it cost him a pound of flesh. Upon this new, and to our thinking, most perilous experiment, we entered,—when? Upon the eve of the outbreak of those civil convulsions which shook Europe to its center, and when we were about to add £700,000,000 to the national debt, within the life-time of the then reigning monarch.

Period of Ten years.		Average price of Wheat per Qr. of 8 bushels.
1780 to 1789.	—New York surrendered to Washington by Lord Cornwallis, 1781. The independence acknowledged of the thirteen United States, December 1782. *Tallies* finally abolished, 1783. Pitt introduces his plan for a sinking fund, 1786. Commercial treaty with France, 1787. The States-General of France assembled May 5, 1789. The following harvest deficient, and a great dearth of corn in France. -	s. d. 49 10½
1790 to 1799.	—First issue of *assignats* by the Constituent Assembly of France, April 19, 1790. Louis XVI. beheaded Jan. 21, 1793. The next week England declares war against France, and joins the coalition. *Drain of gold. The Bank contracts its discounts.* Feb. 19.—*One house fails for nearly one million pounds. Panic. Failures throughout the country. Universal hoarding. Upwards of one hundred country banks stop payment.* The following April a committee of the House recommend an advance to merchants, on securities, of £5,000,000 Exchequer bills. The panic subsiding on this announcement, and on an extension of discounts, £2,202,200 only advanced; all ultimately repaid.‡ £5 Bank notes first issued the same month. *General fall of prices from* 1792 *to* 1794.§ Robespierre beheaded July 27, 1794. The issue of *assignats* augmented in 1796 to the nominal amount of £182,316,000, exclusive of the forged imitations said to have been circulated by Pitt. The whole become waste paper The same year Buonaparte overruns Italy. Some French troops land in Wales from a frigate driven on the coast. *Alarm of invasion. Discontent in the fleet; subsequently breaking out into open mutiny. Drain of gold. The Bank contracts its circulation from* £10,824,150, *March*, 1796, *to* £8,640,250, *February* 27, 1797. *The next day an order in Council commands the Bank to suspend specie payments.* Bullion left February 28, £1,086,170. March 4, £1 and £2 notes first issued. The same year the 4s 2*d. dollar* re-stamped, and issued at 4*s.* 9*d.* Three deficient harvests in this period. Gazette averages of wheat, January, 1799, 49*s.* 6*d.* Windsor averages for the ten years - - - - - - - - - -	62 1½

Three-and-twenty years only have elapsed since the adoption of an exclusive gold standard, and we find it has broken down. We have now a new standard of *inconvertible* paper, supported by the joint credit of a wealthy corporation and that of the State. The origin of the distrust of this paper, and the apprebenof the bullionists, will be seen in the fate of the French assignats. The re- , however, was not the same in both cases, and it is important to point out the son. Wherein did the *English* assignats differ from the inconvertible notes the French Constituent Assembly? The difference was in this—not in the rm of note, for forms are immaterial, but in the principle of their issue. The rench assignats were *given away*[*] by the government in payment of its own penditure; the English assignats were *lent* only, and *lent at interest*, upon secu- ties for the return of the original notes, with the interest in addition.

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* Bullion Report. Allen's evidence of 1810.

† The *as*, or *pondo*, (whence the word *pound*) coined into twelve parts or *unciae*, 350 years before Christ. The silver *denarius* was first coined 250 years before Christ. The gold *aureus*, 204 years before Christ.

‡ "History of the Bank," by J. Francis. Vol. I., 216.

§ Tooke, vol. i., page 178.

It is extraordinary that this most essential distinction should not have been de- ected by the bullionist writers of the time, or if detected, that they should still ave reasoned then, as the advocates of convertibility for the most part reason ow, as if there were no difference between the accommodation bill of a swindler d the promissory note of a Rothschild; and upon the sage maxim, that paper oney is always paper money, and therefore to be regarded as the object of a gue terror, no matter what the conditions of limitation, and the check imposed on excessive issues.

Observe the operation of the check in the case of the assignats of the Bank of ngland. The Bank could not have issued £180,000,000 of these notes, because e public would not have been willing or able to pay £9,000,000 per annum for e use of them, and because, if willing, it could not have found £189,000,000 to posit *in securities* for the re-payment of capital and interest. And observe fur- er that the check *now* upon excessive issues of Bank of England notes is not nvertibility, (excepting at a moment of drain,) but the provision made for re- lling the same notes at average intervals of three months, with interest for the e of them during that period. In ordinary times, the interest of a bill discount- l at the Bank of England, is paid with the notes of the Bank of England, as ring the Restriction Act—not with gold. And this does not at all interfere ith the operation of interest as a check, because *the principle of the check is the ceiving more back than was paid out.* The present regulation of this check is, owever, imperfect; and it was imperfect during the war, for a reason we have ready pointed out,—the difference between a *nominal* and a *real* rate of interest. he tax paid for the use of paper money should be governed by the return of cap- al, as measured by a general average of commodities—not by gold alone. In her words, nominal rates of interest should rise with the nominal prices of com- odities, (not fall, as under our present system.) *Paper money issued only upon curities, and at rates of interest so regulated, could never be issued in excess.*

We may here afford a smile at that total oblivion of history which enables a rtain class of writers, and writers not always of the least pretensions, to declaim pon the *impossibility* of an inconvertible currency in a commercial country. The st is lost upon them. The Spanish Armada, fitted out with gold, was defeated the impoverished exchequer of Elizabeth, with *wooden tallies*. A life and death ruggle with the armies of Napoleon was maintained for twenty years with *Eng- h assignats*, and those very assignats, or inconvertible bank notes, *bought the ld* which, in 1819, enabled the Bank of England to resume cash payments.

98.—Rebellion in Ireland.

99.—The Duke of York capitulates and abandons Holland to the French. Fall in the prices of transatlantic produce, coincident with a rise in the price of corn. Numerous failures in the commercial towns of Bremen, Amsterdam, Frankfort, Hamburgh, &c., extending also to Liverpool. In Hamburgh the rate of discount raised to 15 per cent., and 82 merchants there stop payment for £2,500,000. *The pressure at Liverpool relieved by a government advance of £500,000 in Exchequer Bills.*[†]

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[*] This does not apply to the first issue of the Constituent Assembly in 1790, which was limit- to £2,500,000, and which the government received back again in the taxes, and in payment the confiscated estates sold by auction. The subsequent excessive issues, without any provi n for withdrawing any portion from circulation as they fell in value, were in the days of the *ational Convention*, and the first *Legislative Assembly*, bodies both of them constituted of ferior elements to those which formed the *Constituent Assembly*. The notes of Law's bank, years before, became depreciated in a similar manner. The Regent borrowed and paid them ay at his own discretion and the Bank, though it advanced them at interest, took false secu ies for the payment—the security of a bankrupt government, and the fictitious values of issippi bonds.

[†] Tooke's "History of prices," vol. i., p. 233.

1800 to 1819.—1800. Union with Ireland, (39 and 40 George III., c. s. 1. 67.) Two deficient harvests, and a great foreign demand for corn, partly occasioned by the war. Price of wheat, March, 1801, 156s. 2*d*. per quarter. Falls at the close of the next year to 57s. 1*d*. Peace of Amiens in 1802. The war renewed, 1803. Price of wheat falls to 49s. 6*d*., March, 1804. A prohibitory duty imposed the same year of 24s. 3*d*. per quarter on the importation of wheat, when the price should be under 63s. The 4s. 2*d*. dollar re-stamped, and issued at 5s. Threats of invasion. A flotilla assembled at Boulogne by Napoleon. Arming of the militia, 1805. Martello towers erected along the coast; battle of Austerlitz; and death of Nelson in the naval victory of Trafalgar. The Berlin decrees of Napoleon interdict the commerce of England with the continent, 1806. England retaliates, 1807, by prohibiting the trade of neutral vessels. Russia closes its ports against England, and Napoleon issues further decrees from Hamburgh and Milan to enforce a strict blockade of the British Islands. Rise of prices in hemp, flax, tallow, Memel timber, silk, wool, and other articles, affected by these decrees; and great speculation in them, extending to copper, lead, and all materials generally of army munitions. 1808.—Great speculation in the shares of new companies. Deficient harvests this and the following year. 1809.—The English retreat from Portugal, and fail in their disastrous expedition to Walcheren. Gold rises to £4 12s. per ounce. The bullion committee appointed Francis Horner, chairman. Average price of wheat, 88 7d.

The report of the bullion committee, made in the following year, is the most graphic illustration of the Tenterden Steeple fallacy that it would, perhaps, be possible to find in the history of philosophy. It is a report in which the effect of deficient harvests—the effect of a war expenditure exceeding 500,000,000 for the twelve preceding years—the effect of the new Corn Law—the effect of the Berlin and Milan decrees—stand for nothing as disturbing elements of commerce, and the restriction of cash payments alone, is stated to have caused the fall of the exchanges and rise in the price of gold, and also to have led generally to a rise in the price of all commodities. Upon each of these points the report has been ably answered by Mr. Tooke, himself a qualified supporter of the same metallic theory. Mr. Tooke proves—1. That the rise of prices was neither general nor uniform, and that in the two last years, when gold was rising, the reaction of the speculative spirit of 1807 and 1808, caused a general fall in the price of all commodities that had been affected by it.* 2. That for the twelve years following the restriction act, there was only one period of a few months (in 1801 and 1802) during which the price of gold was above £4 per ounce, (the price fixed by the Bank,) or the price of silver higher than it had been during the greater part of the last century; and 3. That the state of the Bank circulation was remarkable for its equability during nearly the whole of this period, and not greater than it would probably have been without a restriction act. Mr. Taylor has also pointed out (a fact overlooked both by Ricardo and Mr. Tooke) that coincidently with the first rapid rise of gold in the autumn of 1808, there was not an expansion, but a great contraction of the circulation.†

		Bank Notes in Circulation.	Price of Gold per oz.		
August 21, 1807	- - - -	£19,678,360	4	0	0
" 1808	- - - -	17,111,290	£4	10	0

This is, perhaps, the most decisive evidence that can be offered, as a single fact of the variableness of gold as a standard of value, and the delusiveness of the modern theory of the foreign exchanges. The fall in the exchanges of this period, that is to say, the lowered value of all bills drawn upon London, was simply occasioned, not by any depreciation of bank paper, in the true sense of the term, but by the enormous excess of those bills in the market, in reference to the demands of a crippled trade,—bills drawn by English officers abroad on army agents at home ills drawn by foreign powers on the English treasury on account of subsidies. subsidies to foreign powers, which for seven years had been inconsiderable, e, in 1808, £2,897,873, and for the seven years, ending 1814, £29,091,989, a large proportion of which had, through the "continental system" of Napo- , to be paid in gold.* The subsequent history of the Exchanges is that of upon London sometimes rising in price with an increase of the Bank circula- , and some times falling, and falling when the expansion was greatest, viz. in 4.

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* "History of Prices," vol. 1, page 316. Mr. Tooke says that, with the exception of corn, land, and materials of ship building, &c., "all objects of exchange were lower in price in [illegible] and 1811 than in 1800; in few instances less than 20 per cent., and in some instances upwards of 50 per cent., as measured in paper; while gold had risen 25 per cent.

† "The Minister Mistaken," p. 11.

0.—Depression of prices on the recoil of speculation. Extensive failures, and great demand for money. The Bank increases its circulation by £4,500,000. Price of gold falls from £4 11*s*. £4 4*s*. 6*d*.†

1.—Regency Act passed (Feb. 11.) Immense armies traverse the continent. Gold again rises, and guineas, shillings, and even pence, begin to disappear from the circulation. The 4*s*. 2*d*. dollar issued at 5*s*. 6*d*. The House, to prevent the inconvenience of rents being claimed in gold, adopt a resolution, on the motion of Mr. Vansittart, to the effect that a one-pound note and a shilling shall be a legal tender for a guinea—guineas then selling at 27*s*. in Bank paper.

2.—Through a succession of four bad harvests at home and abroad, the price of wheat rises in August to 155*s*. per quarter. Price in France 150*s*. per quarter.‡ Wellington victorious in Spain. The French retreat from Moscow (Oct. 19.)

3.—Average harvest. Wheat falls in Dec. to 73*s*. 6*d*. Gold rises to £5 10*s*. per ounce. General opening of continental ports, and rise of prices of most articles of British export. Napoleon defeated at Leipsic.

4.—Restoration of the Bourbons (April.)

	Bank Circulation.
28th Feb.	£24,801,080
31st Aug.	28,368,200

	Bullion in the Bank.	Price of Gold.
28th Feb.	£2,204,430	£5 8 0
31st Aug.	2,097,680	4 5 0

5.—Gold again rises in price on the escape of Napoleon from Elba. Falls after the battle of Waterloo. National Debt, at the close of the year, £856,984,028.§

6.—Deficient harvest. The pound troy of standard silver coined into 66*s*. A great increase in the foreign trade, but a more than corresponding fall in the prices of Baltic and other produce, now glutting the home market, causes heavy losses and numerous bankruptcies during this and the two preceding years.

		EXPORTS.
Official Value.	1813	£37,980,977
	1816	57,420,430‖
		IMPORTS.
"	1813	£24,923,922
	1816	31,822,053

7.—Savings' bank fund established (57 Geo. III., c. 105 & 130.) Spafield riots. The Bank begin voluntarily to resume cash payments, but are checked by

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* BULLION IN THE BANK OF ENGLAND.

1808.	Feb. 28	£7,855,470
"	Aug. 31	6,015,940
1809.	Feb. 28	4,488,700
"	Aug. 31	3,652,480

† Tooke's 'History of Prices,' vol. i., p. 362.

‡ Ibid., vol. i., p. 334.

Fourth Report of the Committee on Income and Expenditure.

We have explained, in a former note, but would again draw attention to the fact, that a t part of the now customary excess of exports over imports, is occasioned by the Foreign Colonial expenditure of Government; for which, of course, there is no return in either ey or goods.

Government; the operation of heavy French and Rusian loans, raised at a high rate of interest, having suddenly led to an export of bullion.

	Bank Circulation.	Bullion in the Bank.
Aug. 31 - -	£29,543,780	£11,688,260

1818.—Increased forgeries of bank notes. First coinage of the present Sovereigns containing 5 dwts. 3¼ grs. of gold. Numerous Reform meetings. (About this time the writings of William Cobbett create a general but an erroneous belief in a necessary connexion between bank paper and high prices.)

1819.—Manchester massacre. Resumption of cash payments. 59 Geo. III., c. 49, enacts that on the 1st of May, 1823, all notes of the bank of England shall be payable in gold on demand at £3 17s. 10½d. per oz. Prior to that period, not to be paid in smaller amounts than the value of 60 oz. at £3 19s. 6d. till 1st of October, 1831; and not less than 60 oz. at £3 17s. 10½d. till October, 1823. English as well as foreign coins allowed to be exported, by the same Act. Average price of wheat in 1819, 72s., but through the effect of five deficient harvests during this period, aggravated by the corn laws, the average price of wheat at Windsor for the ten years s. d. 100 7

It must be said of British statesmen that if they sometimes lack foresight, they are at least never wanting in courage. The new experiment of 1774, of adopting as a single standard the rarest and dearest of the precious metals, had failed after a brief trial, and we find a legislature in 1819 yet bold enough to return to it, and to return to it at a moment of falling markets,—the necessary consequence of a diminishing monopoly of the foreign trade of the world, and a diminishing government expenditure,—and with such an accumulation of debt as the world had never before seen,—a debt of £850,000,000, the dividends of which were now to be paid in gold, and the principal itself, to whatever extent it might please the fundholder to sell, at a moment of distrust, or when tempted by a better investment abroad.

The fallacy which misled the House and the political economists of that day, by whom ministers were influenced, was the comparative cheapness of gold, on the return of peace, when every hoard on the Continent was suddenly released; and the apparent consequent facility of meeting with gold all engagements of Bank paper. But this temporary cheapness was no test at all of what the difficulty might be of obtaining the amount of gold required, when new causes for hoarding it might arise; and surely with the gigantic mass of credit we had then built up, there ought to have been some misgiving of the prudence of risking the public security upon such an improbable contingency as the chance of no new and unexpected demand ever arising for bullion greater than the average quantity that could conveniently be retained in this country. Some alternative of safety against a violent collapse of credit obligations, should at least have been retained until provision had been made for the ultimate extinction of the debt—until the paper which contracted the debt had discharged it—and this, but for the unfortunate state crotchet of convertibility into gold at a fixed price, would have been a matter of very simple financial arrangement. The history of the bullion market, on the peace of 1815, shows that gold was then so rapidly becoming a drug that had it not been for the large purchases of the Bank of England at £4 13s. 6d. and £4 per oz., with a view to the resumption of cash payments, gold would have fallen below the value of the Bank inconvertible paper; and with Bank notes at a premium, a comparatively trifling bonus would have induced the fundholder to have accepted, in exchange for his perpetual annuities, *terminable and life annuities*, of which some of the youngest among us might have hoped to live long enough to see the last.*

1820.—5[illegible] Geo. III., c. 68, provides that silver shall not be a legal tender for more than 40s., instead of, as before, a legal tender for £25. Geo. III. dies, in the 82d year of his age. Cato-street conspiracy.

1821.—Death of Napoleon Bonaparte at St. Helena. Coronation of Geo. IV. and death of Queen Caroline. The Bank pay all demands in gold.

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* It should be understood that bank paper was always convertible into gold during the war but that the payment was *optional*, and not at a fixed price. The difference between gold and paper from 1803 to 1809 was but £2 13s. 2d. per cent. In 1813, £22 18s. per cent. The average difference during the last seven years of the war, was about 15 per cent.

[illegible]2.—Continued revulsion of prices, the funds excepted, and great commercial depression throughout Europe. The act of 1819 attacked in the House by Mr. Western and Mr. Attwood. The House defers the contemplated abolition £1 notes in 1823. A potato famine in Ireland. Mr. Vansittart reduces the 5 per cents to 4 per cent. Meetings on the subject of agricultural distress.

1823.—Rising prices, improving trade, and falling rates of interest,* towards the close of this year.

1824.—Great speculations in the scrip and shares of foreign loans and new companies.

1825.—The recoil of speculation in the autumn of this year produces an increased demand for money, and *a run upon the London and Country Banks* Seventy banks in town and country stop payment in the month of December. *A drain of Gold*, consequent upon these stoppages, *exhausts the bullion of the Bank*. The Bank, supported solely by its credit, which remains unimpaired extends its issues of paper by *eight millions in one fortnight*; upon which the panic subsides, and confidence is gradually restored.

BANK RETURNS.

	Circulation.	Bullion.
Feb. 28, 1823	£18,392,240	£10,384,230
28, 1824	19,736,990	13,810,060
28, 1825	20,753,760	8,779,100
Aug. 31, 1825	19,398,840	3,634,320
Dec. 3, 1825	17,477,290	
24, 1825	25,611,800	1,027,000
Feb. 28, 1826	25,467,910	2,459,510
Aug. 31, 1826	21,563,560	6,754,230
Feb. 28, 1827	21,890,610	10,159,020

The drain of bullion appears to have extended (from the evidence of Lord Ashburton) considerably below the point shown in the official returns, even to "a few thousand pounds," but the increased issue of notes quickly enabled the private bankers to return the surplus portion of the gold they had withdrawn. Prior to this, the Directors in their consternation had consulted the Government upon another Restriction Act, which was peremptorily refused. It mattered not; the Directors took upon themselves to return to the principle of issuing inconvertible notes; and the confidence of the public, not in the gold of the Bank, but in its known solvency, carried them through the dilemma.†

The state of the circulation in 1824, proves that if the speculative spirit which then arose had been occasioned by money, it was an excess of *gold* rather than an excess of notes that was in fault. But let us not fall into the common currency mistake of confounding the effect with the cause. Both paper and gold were in excess of the average demand for money; the cause being, that with rising profits the demand for money had diminished. The speculative transactions of the time were conducted through the medium of the *money of account*. The demand for either bank notes or metallic money did not set in till the whole body of speculators became infected with distrust; and then we see how, in a moment, the principle of immediate convertibility into gold, *with no alternative of safety*, involves the prudent and the imprudent—the reckless gambler and plain plodding industry—in one common gulf of ruin.

1826.—Depression of trade throughout the first half of the year. The Government advance £2,000,000 of Exchequer Bills to the Bank. The Bank advance a similar sum to manufacturers, on the security of dock warrants, bills of lading, &c. Trade resumes its accustomed channels.

1827.—7 Geo. IV., c. 6, prohibits the circulation of small notes for sums under £5, after April 5, 1829.

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* 3 per cent. Consols.	Premium on Exchequer Bills.
April 23, 1823....73¼	10s. to 12s.
Jan. 1, 1824....86	51s. to 53s.
" 1825....94¼	68s.

† Including *deposits*, the total of their liabilities to pay gold on demand, exceeded the amount of gold in hand by 30 millions.

1830.—Death of Geo. IV. French Revolution of July. Opening of the Manchester and Liverpool Railway, and death of Mr. Huskisson.

1832.—Cholera; and popular commotions on the rejection of the Reform Bill by the House of Lords, and the accession to office of the Duke of Wellington. Placards about the metropolis "to stop the Duke—go for gold." A run for gold, in consequence, reduces the bullion in the Bank to £4,919,000. Legal assent given to the Reform Bill, June 7th.

1833.—3 and 4 Wm. IV., renews the Bank Charter Act, and allows, for the first time the bills of country banks to be made payable in London. Bank notes to be a *legal tender* for sums above £5, excepting by the Bank itself, or its branches.

1834 to 1837.—Three months' bills exempted from the usury laws by the 3d and 4th Wm. IV., c. 98. Improving prices, and speculations in railway and other share undertakings. President Jackson abolishes, in 1836, the Bank of the United States, and takes measures to establish a metallic currency. Congress reduces the quantity of fine gold in the American *Eagle* from [illegible] to 232 grains, which raises throughout the United States the value of English sovereigns.[*] Consequent *drain of gold at the Bank of England*. Alternate *contraction and extension of discounts*, and general commercial derangement at the close of 1836, and the beginning of 1837. American houses the greatest sufferers. Death of William IV., 1837.

BANK RETURNS.

	Circulation.	Bullion.
1834. Jan. 7.	£18,216,000	£9,948,000
Sept. 23.	19,126,000	7,695,000
1835. June 4.	18,460,000	6,150,000
1836. June 28.	17,899,000	7,362,000
Sept. 21.	18,147,000	5,719,000
1837. Feb. 28.	18,165,000	4,077,000

1838 and 1839.—Two deficient haevests. Price of wheat 81*s*. 6*d*. for the second week of January, 1839. Large importations of corn, and consequent *drain of bullion*. The Bank seek to check the drain by contracting its circulation and raising the rate of discount to 5½ per cent., but without effect. Acts upon the exchanges by the creation of accommodation bills to the Amount of £2,500,000, drawn upon the bankers of Paris; for which purpose it pledges securities with the house of Baring.[†]

1840.—2 & 3 Vict., c. 37, exempts all bills of exchange and loans above £10 on personal securities, from the operation of the usury laws. *Loans upon the security of real property still limited to 5 per cent.*

BANK RETURNS.

	Circulation	Bullion.
1838. April 3.	£18,987,000	£10,126,000
1839. April 2.	18,371,000	7,073,000
Nov. 12.	17,235,000	2,545,000
1840. Jan. 7.	16,366,000	3,454,000

1844.—Renewal of the Bank Charter. The 7 & 8 Vict., c. 32, divides the Bank into two departments, an *Issue department* and a *Banking department*; and limits the amount of Bank paper that may be issued upon other securities than gold to 14 millions. It also limits the issues of country banks, whether upon gold or any other security, to the average of the 12 weeks ending April 27; about £8,000,000.

1845.—The 8th & 9th Vict., c. 37, limits the circulation of Irish banks, and the 8th & 9th Vict., c. 38, limits the circulation of Scotch banks to their then issues. Bank of England notes not to be a legal tender in Scotland.

The three last measures were passed in fair weather times, when in consequence of the improvement of trade the demand for *real* money was diminishing, and business was again transacted through the medium of the *money of account*—gold again a drug, and those who held notes representing it finding a difficulty in placthem at 2½ per cent. The operation of the principle involved in this import- distinction between the money of account and real money not having been erstood, it was not perceived by the legislature that the mere crippling of bank- resources would do literally nothing towards restraining a spirit of commercial rprise within due limits, but would most fearfully aggravate the evils of its re-

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[*] Tooke's "History of Prices," vol. ii., p. 285.

[†] Frances' "History of the Bank," vol. ii., p. 121.

Let it, however, here be observed that this crippling of banking resources is a necessary consequence of the mere separation of departments. *That* prin- e of the Bank Charter we must admit to be a sound one. When we see the ares of men in the position of Governors and Directors of the Bank of England very day occurrence, we ought surely to pause before intrusting the issue of te *paper money* (meaning thereby notes made a legal tender) to the absolute dis- tion of any private parties connected with trade. The only defect of the *Issue de- tment* is that of the Mint,—which coins nothing as a legal tender but gold. ve to the *Issue department*, in cases of temporary need, the same power of en- ging the circulation, upon other securities than gold, which the Bank itself for- rly enjoyed, and let that power, subject to proper control, be exercised not ca- ciously at a moment of panic, but systematically and wisely before the panic rives, and although insolvents could not be upheld, we should hear no more of te *monetary crisis*, in which men of property find themselves on the brink of ankruptcy, and discharged workmen crowding our streets, from a sudden inter- uption of unexecuted orders, against the misfortune of which no foresight could uard. What hinders? Nothing but the principle of immediate and exclusive gold convertibility, to which such a policy would of course be opposed. Blinded o consequences by this theory, and defying the lessons of all time, we go on regu- ating our currency in the infatuated spirit of the gaming table,—staking all we ssess upon the hazard of a single throw.

844 and 1845.—Improving prices and expanding confidence in 1844. Gold again becomes a drug. Bullion, in the two departments of the Bank, September 21, £15,158,964. Bank rate of discount, 2½. Speculations in cotton from deficient crops; and speculations in railway shares from the success of the London and Birmingham Company. The following year speculations in railway shares become a mania, by which this country and the whole of Europe is infected. Bullion, June 14, 1845, £16,613,920. The recoil of speculation in the Autumn produces an increased demand for money, and a rapid fall of all railway securities. Bullion, Dec. 20, £13.378,343. *This first panic confined to the railway interest.* Cold and heavy rains in Autumn prevent the ripening of the potatoe root, and the crop proves unsound.

846.—The corn laws repealed. Railway shares partially recover, and fall. Rally till harvest, and again fall. Bullion, August 29, £16.366,068. Dearth of corn in France. A nearly total failure of the potatoe plant in Ireland from the combined effects of unripe seed and an unusually dry season. A labour rate act passed for the employment of the Irish during the winter. Large importations of corn, and *beginning of a drain of gold.*

847.—March 1.—The Chancellor of the Exchequer contracts with Messrs. Baring and Rothschilds an Irish loan of £8,000,000, at the rate of £3 7*s*. per cent. The relief measures of the English and French Governments produce an exaggerated demand for corn, and raise the price of produce throughout Europe. The drain of gold increases about the period of the April dividends. £7,000,000 of gold withdrawn in less than six months. The Banking department compelled to refuse discounts, or to make advances upon Government stock, or even silver bullion. Money suddenly becomes excessively dear. *Panic and universal mercantile depression.* Gazette averages of wheat for the week ending May 29, 102*s*. 5*d*.; for the week ending Sept. 18, 49*s*. 6*d*. This rapid fall, and the simultaneous anxiety of holders of corn, holders of cotton, and holders of railway shares to realize, and the directors of new railways to complete their lines by making heavy calls, produce an unexampled demand for money. The Foreign Exchanges improve; but private bankers, in alarm, increasing their cash reserves, *the drain of gold continues.* To provide for the October dividends, the Bank is again compelled to refuse loans and discounts, and this time more peremptorily than before. Private bankers imitating their example, a total collapse ensues of all commercial credit depending upon the negotiability of Bills of Exchange. Forced sales, in consequence, of Consols and every description of security; and a series of failures unequalled in amount at any similar crisis recorded in British history.

Oct. 25.—A letter from Lord John Russell and Sir Charles Wood to the governor and deputy-governor of the Bank, *virtually suspending the provisions of the Bank Charter Act*, and recommending an enlargement of its circulation at a rate of discount *not less than eight per cent.* The Bank acting upon this, the severity of the crisis abates; private bankers release their surplus reserves, while at the same time, from the continuing distrust of English bills, bullion flows in from abroad with unusual rapidity.

Nov. 23.—The first session of a new Parliament opened by Royal commission. The House extends the time for making railways; appoints a committee to consider and report upon the state of the currency, and adjourns for the holidays. Bank Rate of discount reduced from 8 to 7, and from 7 to 6 per cent. during the month.

Dec. 23.—The minimum rate of discount at the Bank reduced to five per cent. All commercial and manufacturing operations continuing limited up to this date, and railway works almost entirely suspended.

⁂ Bullion in the two departments Dec. 4, £11,032,599, of which amount £4,783,065 could not be withdrawn by the Banking Department under the provisions of the Bank Charter Act.

BANK RETURNS.

Banking Department.

	Liabilities in Deposits and seven days' bills.	Cash reserve.
1844. Sept. 21	£14,778,345	£9,540,804
1845. June 14	17,552,981	10,551,420
1846. Aug. 29	17,189,760	9,939,938
1847. April 17	13,925,799	3,087,056
" Oct. 23	14,301,916	1,994,516
" Dec. 4	17,126,533	6,249,534

In closing this curious, and we trust it will be found useful historical digest of the contents of some hundred volumes, there are three things which may perhaps especially attract our notice, while they leave upon the mind an impression of wonder. First, the fact that the principle of exclusive convertibility into *gold*, which, from the self-complacent dogmatism with which it has been supported, the public has been led to imagine was as old as the hills, is discovered to be an entirely new experiment, of which every trial has been attended with disaster, and of which the British nation has never yet had the continuous experience of four-and-twenty years! Second, that although the *inconvertible* paper of the Bank bought back the gold which enabled it to resume cash payments in 1821, when the rate of discount was limited by law to £5 per cent., it should in these days have been considered necessary by Government, and at a moment of excessive depreciation in the value of all commodities relatively to money, to raise the *minimum* rate of discount to 8 per cent. to secure a return of bullion. Third, that a body of legislators approving of such ruinous rates as a temporary expedient, and impressed with a belief that railway calls are nearly the sole cause of our present embarrassments, should meet and dissolve, without even one thought of the expediency of repealing that last portion of the usury laws which still prohibits Railway Companies, and the owners generally of lands and houses borrowing money upon the security of *real property* at a rate of interest exceeding 5 per cent.!

We conclude by calling upon the members of the new Currency Committee to consider the order in which their inquiry should be conducted in reference especially to those interests of the country which are at the present moment placed in the most immediate jeopardy.

Assuming the fact—about which there has been no controversy—that the engagements of the existing body of railway shareholders are beyond their means, We would suggest the importance of proceeding at once to the question of—whether the nation itself is in a similar position? If there be no evidence of any deficiency of capital nationally, but on the contrary, the most conclusive proofs of more than average abundance of food, and all the materials of labor, we would then urge upon the Committee the duty of devising some plan,—with or without a departure from the principle of convertibility, by which the national capital may be rendered available for setting the railway laborer again to work, and staying that useless waste and destruction of property now going forward, for which we must all pay in the end.

This—their first and most serious obligation discharged, we would recommend to their consideration the following propositions; a concise summary of thewhole of the preceding argument.

First—*That a given quantity of any one commodity, such as gold, or any two commodities, such as gold and silver, or gold and paper, subject to a variable demand, is a delusive criterion of value; one which in all ages has operated unequally and mischievously in the adjustment of contracts, and led more than any other cause that can be named, to the proverbial vicissitudes of trade.*

Second—*That the only true standard of value is that which is obtained by the comparison of general averages; and that the issues of all notes, or coins, allowed to be circulated as a legal tender, should be regulated by such a standard and such an standard alone.**

NO. 2.—THE TRADE AND COMMERCIAL PROSPECTS OF GREAT BRITAIN.

London, 2d March, 1848.

To J. D. B. De Bow, Esq.

The aspect of commercial affairs in England at the present moment, though far from being promising, is not so really deplorable as might reasonably have been anticipated. A want of business and an equal want of confidence show themselves too often in the markets. Sales are effected, but they are very limited, and whatever the kind of business "done," it lacks the appearance of that security which hitherto has especially been the property of the British Market. Any depression in the commercial interests of England is naturally regarded with more than ordinary degree of mistrust; this arises from the high and safe position our markets have held in the eyes of other nations, and not wishing for the destruction of *that* "credit," immediately fills the mind perhaps, with more alarm than the state of monetary and other affairs warrant. It is clear, however, in the sight of every attentive commercial man, that our funds are lower than they were, that a great portion of the confidence that should exist between buyers and sellers, is destroyed, and that in fact the entire system is in a state of complete disorganization. As far as it is possible in the present article, we shall point out the main causes from which this state of things have arisen, although our limits will preclude us from entering into any very minute analysis of the question.

From whatever point we view the case, we instantly revert to the circumstance of Railway Speculation being the groundwork upon which the fabric is raised. Not only is public security a little damaged by the appearance of these bubbles, but any capital that honestly might be embarked in the enterprise, is now fast locked up, bidding fair to continue so, until some salutary measure is introduced, that will act as a relief to the pressure, hence arises to a certain extent the dulness that is so prevalent. This has made buyers of every shade, extremely careful in their purchases, and as a consequence of this, the funds have gradually declined, to speak in average numbers from 93 to 83. The recent disturbances in France, have also operated fearfully, the three per cents having in one day fallen 6 per cent. This was upon the arrival of the news that a Republic had been declared, yet with all this, a prudent speculator would sell, rather than buy: for although there is no immediate prospect of matters becoming worse, still, the mere disadvantage of having capital lying dormant for a year or two, is no desirable achievement. The effect that this has had upon trade generally has been serious, for although of late no large houses of note have failed, the breaking up has penetrated into the smaller and less wealthy tradesmen. This class, unable to stand the least pressure, succumb directly, their affairs become in every way deranged. By the bye, the Commissioners of the Bankruptcy Courts are beginning to take serious notice of the fraudulent dealings adopted to obtain certificates (of which a great many have recently been brought to light,) by suspending the proceedings for one, two or three years in accordance with the flagrancy of the case.

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* The value of money, *per se*, and the value of capital generally would then accurately correspond, instead of continually varying, as under the present system. For example,—suppose it to be agreed that the average return of capital is in this country fairly represented by a dividend of £3 upon £96 of Consols. If consols rose to £100 and other commodities rose in the same proportion, it would prove that money (not capital) was in excess; and it would in such case be the duty of a *national* bank to raise the rates of discount upon notes, and to stop all further issues of coin by the mint. If, on the other hand, the prices of commodities generally fell below the average return to capital, and Consols were, say at £80, proving an increased demand for money, it would then be the duty of a national bank to lower its rates of interests upon loans and discounts, extending its issues of paper upon unexceptionable securities, and at the same time extending the supply of mint coins.

We are much interested in the late proceedings with reference to the currency question as chiefly elicited in the debate in the House of Commons on the Bank Charter act. Our readers may remember that when the act was first brought into operation it was under circumstances of a most disadvantageous nature, for until a few months ago, there has not been seen such an expansion of credit either for the importation of corn or the construction of public works, nor so great an inability on the part of the commercial world to fulfill its engagements, so that really its introduction was at a most unfortunate moment, and no provision could be made to meet these exigencies, because they were not only entirely unexpected, but impossible to be foretold. It was no deficiency of circulation which caused the Panic, and as a proof of this, reference may be made to the fact that the amount of provincial bank notes in circulation had not been reduced to any material extent. The amount of English Bank notes in circulation in the month of August and September, 1847, was only £200,000, which was £250,000 below the amount actually in circulation during the corresponding months of 1846, whilst the circulation was upwards of one million below the legal limit of their issues. In Scotland there was scarcely any difference between the circulation in the months of August and September, 1846, and August and September, 1847. The only country notes which were considerably lower in point of circulation in August and September last, than in the corresponding months of last year, are the country bank notes of Ireland, but there no commercial failures had occurred up to that time, and indeed throughout the times of the pressure. the Bank of England have refused to discount any bills which at any other period it would have discounted. Perhaps a high and advanced rate of discount was demanded, but from the commencement of the the year up to the close of 1847, they did not refuse to discount any bill which came under the usual rules observed by them under ordinary circumstances. Now as far as it can be judged from events that have since taken place, it is fair to presume that the failure of the crops causing an increased outlay for corn was a material cause of the Panic; this added to the constant scheaming in the markets; (in these quarters denominated "pigging") went far to create the evil. The official returns show that from June, 1846, to the 5th of January, 1847, the cost of corn was £5,139,476. The quantity imported from January to July 5, 1847 was £14,184,000 and again the cost of corn imported from July 5 to October 10th, (three months,) was £14,240,000—thus proving that the charge for the quarter ending the 10th October was about that of the previous half year. During those three months the pressure in the money market was the most heavily felt, consequently we are justified in attributing the cause of the scourge to the great amount namely £33,563,476 paid for foreign corn in the interval of one year and a quarter. In allusion to what we have already stated as regards Railway Speculation being a cause of the Panic, it may be as well to state a few statistics with reference to the assertion. In the year 1841, 1842 and 1843, the amount sanctioned to be expended was in each year about £4,500,000, in 1844 it was £9,815,000; in the last half of that year it was £26,670,000, in the first half of that year, 1847, it was £25,770,000, and if the expenditure should proceed in the same increasing ratio, the amount sanctioned to be expended for the half year ending the 31 December, 1847 amounted to £38,000,000—of course this sum does not include any portion of the preliminary expenses. It is consequently evident that on account of the Railways alone the amount of available to be abstracted from other purposes during the last year (inclusive of expenses) is not less than from eighty to ninety millions.

The *Bank act* doubtless was the cause of many failures of houses which otherwise would have remained solvent. We have taken the list in order as they are presented by the balance sheets of the various banks, and from the whole, there are scarcely any who may be considered really bad, while at the same time there are about a dozen who will, and indeed are in progress of paying twenty shillings in the pound. If this be admitted, surely these houses should not have been compelled to suspend payment, and the same may be said of those who will pay from fifteen to eighteen shillings in the pound, and who would have been able to have paid all their creditors in full and have a balance left if not compelled to throw their stock upon the market to sell for whatever it would fetch. It cannot be regarded as any other than an anomaly to allege that it is for the benefit of commerce that houses should be thus pulled down. The list is as follows:

Stopped. 1847.		Names and Business.	Liabilities.	Assets.
Aug.	6	Charles Douglas and Son, corn trade	—	—
	9	E. Robinson (deceased,) Mauritius trade	—	—
	10	Leslie, Alexander, and Co corn trade	£573,502	£231,869
	11	Coventry and Sheppard, ditto	—	—
	11	King, Melvil, and Co., ditto	—	—
	13	Giles, Son, and Co., ditto	152,824	90,911
	21	W. R. Robinson, and Co., merchants	94,362	100,390
	23	Castellian, Sons, and Co., merchants	69,651	33,603
	27	W. and J. Woodley, corn trade	99,509	90,845
Sept.	4	T. Booker, Sons, and Co., ditto	—	—
	10	Thomas Usborne and Son, ditto	59,457	33,527
	10	Hastie and Hutchinson, ditto	50,451	38,796
	11	Gower, Nephews, and Co., Mauritius trade	450,832	112,831
	11	Alison, Cumberledge, and Co., South American trade	—	—
	14	Sanderson and Co., discount brokers	1,725,000	—
	17	Reid, Irving, and Co., Mauritius trade	660,432	846,756
	25	Cockerell, Larpent, and Co., East India trade	619,393	809,254
	27	Cockburn and Co., army agents	—	—
	27	M. L. Bensusan and Co., Mogadore and Barbary merchants	52,016	6,951
	28	Perkins, Schlusser, and Mullens, Baltic and East India trade	127,327	136,047
	29	Fry, Griffiths, & Co., India and colonial brokers	90,970	19,231
	30	Lyall, Brothers, and Co., East India trade	340,387	151,556
	30	Samuel Phillips and Co., ditto	101,474	100,075
	30	William Tulloch Fraser, ditto	33,665	40,297
Oct.	4	Rougement Brothers, merchants	—	—
	4	John Thomas, Sons, and Lefevre, ditto	401,760	441,972
	7	F. J. Van Zeller, ditto	—	—
	9	Richards, Little, and Co., East India trade	144,676	50,430
	10	E. Bernoulli, merchant	—	—
	10	Manoel J. Soares, ditto	—	—
	11	Jas. & W. Morley, Manchester warehousemen	119,731	89,217
	12	William Nash, ditto	—	—
	13	Barclay Brothers, and Co., Mauritius trade	389,504	398,491
	15	Laurence, Philips, and Sons, East India trade	18,368	64,840
	17	F. Barnes, and Co., ironmongers	—	—
	23	Scott, Bell, and Co., East India trade	—	—
	27	J. P. Howard, and Co., Colonial brokers	—	—
Nov.	1	Coates and Hilliard, American merchants	72,057	35,462
	2	L. S. Curtis, hide trade	—	—
	6	Judah, Cohen, and Sons, West India merchants	—	—
	8	Thurburn and Co., East India trade	109,139	139,604
	8	Johnson, Cole, and Co., ditto	112,666	71,844
	10	Ryder, Wienholt, and Co., merchants	34,587	23,670
	12	Abbott, Nottingham & Co., shawl warehousemen	—	—
	15	Trueman and Cook, colonial brokers	—	—

Stopped.		Names and Business.	Liabilities.	Assets.
1847.				
Nov.	16	Robert Farrand, corn factor - - -	—	—
	22	J. and H. Reay, wine merchants - - -	47,791	13,510
	22	A. A. Lackersteen, East India trade - -	178,115	80,742
	22	Lackersteen, Crake, and Co., ditto - -	37,555	25,251
	25	Tanner and Ward, leather factors - -	22,000	8,000
	28	Sargent, Gordon, and Co., produce brokers -	—	—
	28	Leaf, Barnett, Scotson, & Co., warehousemen	85,575	89,079
Dec.	2	W. Pemberton and Co., Canada merchants -	—	—
	2	Charles Trueman and Co., merchants - -	—	—
	9	Gates, Coates, Bartlett, & Co., Calico printers	13,000	2,000
	11	Lysaght, Smithett, and Co., East India trade	—	—

It will be accounted perfectly legitimate, if in this article we give a brief summary of the transactions of the Saving Banks during the past year. I believe your readers will concur that the chief design of these Banks was to receive small contributions from the industrious classes, therefore some judgment may be formed of the condition of that sect of people from the official returns. According to these statements the total amount of the balance of each class of the depositors stands thus:

	20th November, 1846.	20th November, 1847.
Balances not exceeding £20 each	£138,884	£140,329
do between £20 and £50,	328,950	314,909
do between 50 and 100,	397,260	344,712
do between 100 and 150,	267,374	213,037
do between 150 and 200,	203,729	150,860
do exceeding 200	12,884	8,831
Totals on 29th November, 1846 and 1847,	1,349,081	1,172,678
Total on 20th November, 1847,	1,172,678	
Decrease on 1847,	176,403	

The difference in the amounts of the above balance on the 20th November, 1847, and on the 20th November, 1846, is thus shown:

	On 20th November, 1847	
	Increase.	Decrease.
Balances not exceeding £20 each,	1,445	——
do between £20 and £50 each,	——	14,041
do do 50 and 100	——	52,548
do do 100 and 150	——	54,337
do do 150 and 200	——	52,869
do exceeding 200 each,	——	4,053
	1,445	177,848
Increase,		1,445
Balance decrease,		176,403

The proportions which the above increase and decrease in the total amounts of the balance on the 20th November, 1847, bear to the total amounts of the balances on the 20th November, 1846, will be found as follows:

	On 20th November, 1847.	
	Increase.	Decrease.
Balances exceeding £200 each,	"	one-third
do between 150 and 200 each,	"	one-fourth
do do 100 and 150	"	one-fifth
do do 50 and 100	"	one-seventh
do do 20 and 50	"	one-twenty-third
do not exceeding one ninety-six		

Again, according to the same, the total number of depositors in each class on the 20th November, 1846, and the 20th November, 1847, stood thus :

	20th Nov., 1846.	20th Nov., 1847.
Depositors respective balances did not exceed 20 each,	18,974	19,792
do do were between £20 and 50 "	10,546	10,123
do do " 50 and 100 "	5,698	4,955
do do " 100 and 150 "	2,204	1,763
do do " 150 and 200 "	1,187	880
do do exceeded 200 each,	44	30
Totals on 20th November, 1846 and 1847,	38,653	37,543
Total on 20th November, 1847,	37,543	
Decrease in 1847,	1,110	

The difference in the numbers of the above classes of depositors on the 20th November, 1847, and on 20th November, 1846, is thus shown :

	On 20th Nvember, 1847.	
	Increase.	Decrease.
Depositors whose respective balances did not exceed £20 each,	818	—
do do were between 20 and 50 "		423
do do " 50 and 100 "		743
do do " 100 and 150 "		441
do do " 150 and 200 "		307
do do exceeded 200 each		14
Totals on 20th November, 1847,	818	1,928
Increase,		818
Balance, decrease,		1,110

The proportions which the above increase and decrease in the total number of depositors in each class on the 20th November, 1847, bear to the total number of depositors, in each class, on the 20th November, 1846, will be found to be as follows :

	On 20th November, 1847.	
	Increase.	Decrease.
Depositors whose respective balances exceeded £200 each,		one-third.
do do were between 150 and 200 each		one-third.
do do " 100 and 150 "		one-fifth.
do do " 50 and 100 "		one-seventh.
do do " 20 and 50 "		one-twenty-fourth.
do do did not exceed 20 each,	one-twenty-third.	

I will now generalize my remarks, and add a kind of running commentary of the state of the English markets for the last week or ten days. It was generally supposed that upon the commencement of the new year, trade would have revived a little, but now it is difficult to discover in what branch of business symptoms of improvement are likely to be of long standing. The partial relief given in consequence of the somewhat easier tone of the money markets, has been naturally alluded to wherever any attempt is made to speculate upon the future, whilst the fact that most articles of produce are much lower in value than at this time year, might seem to afford some inducement to purchasers. The supplies e of the various mercantile markets are not by any means large, and the stock held by merchants and dealers is less than ordinary Last year's panic, coupled with the many underhanded practices on the Corn Exchange will not tend to an improvement. It is stated that in Manchester, Leeds, Wakefield, and a few other grain markets, that the demand for most articles has been rather languid, although wheat was at a more advanced price. Barley, Beans and Peas, were rather on the decline, but Oats remained much as usual. I give the quotations as included in the official programme:

Wheat. Essex and Suffolk red, 44s to 46s ; fine, 47s to 49s per quarter ; new, 40s to 44s ; fine 46s ; white old, 44s to 48s ; fine, 50s to 54s ; Talavera new, 52s to 56s ; Foreign, 48s to 52s ; fine, 54s to 56s.

Flour, per sack, Town, 46s to 49s ; Seconds, 43s to 45s ; Essex and Suffolk on the ship, 41s to 43s.

Oats per quarter, English feed, 19s to 20s ; fine, 20s to 21s ; Poland, 22s to 23s ; fine, 23s and 24s ; Scotch Potatoe, 25s to 26s ; fine, 1s more ; Scotch feed, 22s to 23s ; fine, 1s more ; Irish Potatoe, (old) 20s to 21s ; new-fine, 21s to 22s ; Feed, 17s to 18s ; Black, 19s to 20s ; Foreign feed, 18s to 19s ; Poland, 23s to 24s ; fine, 1s more

Sugar is slowly on the decline as regards Mauritius and British Plantation perhaps one shilling a cwt. Foreign and East India growth holds its place. Brown grocery is about 53s cwt. Coffee would rise if the Home dealers were inclined to purchase, there being on the part of the exporters some desire to negotiate; but as the former are very lukewarm, a slight decrease has taken place, but nothing remarkable in amount.

The funds have received a sudden shock in consequence of the riots in Paris, in one day, as I have already observed, falling as much as 5 and 6 per cent. as each edition of the London newspapers reached the exchange, so is the rise or fall in stocks correspondingly felt. The first decline took place on the confirmation of the fact that the King of the French had been compelled to leave his kingdom, and immediately on it becoming generally rumored, and the report substantiated, that a Republic had been declared, as well as a Provisional government appointed, a more decided fall took place. The undecided state of Belgium has added also to the confusion, and as quickly as any intelligence reaches this metropolis and gains credence among the brokers, it is astonishing to witness the instantaneous effect upon the money market. Railways are in a dreadful condition ; in many of the answering lines, shares may be had for nothing. Holders endeavor to free themselves from the responsbilities they have incurred, little dreaming of the course that events have lately taken. Meetings of shareholders are being convened throughout the city, in the hope of arriving at some satisfactory decision, the general feeling being however in favor of a general postponement of all lines in course of progress.

Your readers have doubtless heard that in the Revenue of this country there is a great deficiency on the last year, added to what the ministry have deemed it expedient to add to the security of the "National Defences" by incrasing the military and Naval establishments. To meet the additional expenditures that such a proceeding would of course incur, and likewise to replenish our almost empty treasury, it was deemed advisable to increase the Income Tax from 3 to 5 per cent. I need scarcely tell you the intimation was received with great disaprobation, both in Parliament, and out of it. The lord Mayor, many clergymen and members of Parliament convened public meetings, and made speeches against the ministerial proposition. So strong and determined were the people in their manifestations of dislike to the new impost, that the Chancellor of the exchequer on the part of the ministry, announced the other evening in the House of Commons that the additional tax would be abandoned.

A considerable degree of agitation is being most energetically made by the Liverpool mercantile men in order to obtain a reduction of the duties on Tea. It has been proven that on account of the exorbitant duty on this article, our trade with China is decreasing annually ; for instance the *exports* in cotton manufacturies declined between 1845 and 1846 from £1,745,141 to £1,246,518 in value. Woolens in the same period from £539,223 to £439,668. In addition to this it appears that the committee appointed by Parliament have reported that the aggregate loss on the manufacturies exported and the teas imported during those two years was [illegible]om 35 to 40 per cent. During the sitting of one of the many meetings convened [illegible]on the subject, I learned that the returns of exports to China were as follows:

	Plain Calicoes.	Pr nted and dyed.
1845.	186,908,000 yards.	2,309,780 yards.
1846.	68,396,175 "	2,451,650 "
1847.	58,278,465 "	2,063,100 "

It is argued that the reduction should be made to one shilling on each pound of tea. The average annual consumption of the article in this country of each individual has been stated to be one pound, nine ounces. In the Isle of Man where the duty is one shilling the average is two pounds twelve ounces. Now it is an undeniable fact that a corresponding increase of consumption of an article takes place directly a reduction of duty is effected. There are not only more consumers, but those who consumed formerly, now consume more largely. It is fair to presume that as the rate in the Isle of Man is two pounds twelve ounces, so that in England after a reduction of duty, it would increase to three pounds. This is a fair assumption, considering that at the present time the average is in Australia as near as possible seven pounds for each person. As a means of increasing the revenues the following calculation may be relied on. With a population of thirty millions at three pounds a head, the annual consumption of tea would be 90,000,000 lbs. The present revenue is about £5,000,000—now 90,000,000 lbs. at one shilling duty would amount to £4,500,000. The increase is 44,000,000 lbs. which will require for sweetning 176,000,000 lbs. of sugar—this at 1½*d* will be £1,100,000. It is generally remarked that it takes five pounds of sugar to sweeten one of tea; this calculation is made however twenty per cent less than the usual estimate so that it might be within the mark. £600,000 would therefore be the increased revenue derived supposing the estimated reduction in the duty took place.

There is every chance of a steam communication with Australia, thanks to the indefatigable endeavors of Lieutenant Waghorn—a certain average communication of sixty-five or seventy days, would alter the entire character and fortunes of New South Wales—imparting to them morally, socially and politically an impetus far beyond the calculations or conception of the most sanguine. Mr. Jackson the resident agent in London for Van Dieman's Land, states in a letter to his constituents, that the cape route is the one finding the greatest favor with the imperial government—as such and in illustration of the powers of the auxiliary screw propeller, with which it is proposed to furnish ships for the intended cape passage it would be well to mention that at a recent trial the Ampheon a 36 gun frigate of 1,284 tons, her performance was so satisfactory, as not to leave a doubt upon the minds of practical men that the voyage would shortly be accomplished in the way named.

As a conclusion to this summary the closing price of the funds and principal Railways are quoted. Consols for money 84, 83¾. Three per cent reduced 84. 83¾. new. Three and a quarter per cents 85, 84¾. Consols for amount. 84.

Blackwall Railway shares 4 to 5. Brighton 30 to 31. Birmingham 132 to 137. Great Western 100 to 102. Dover 25 to 27. Eastern Counties 13 to 14. Hull and Selby 98, to 100. Great North of England, 230. The satisfactory arrangements made by the English Government with the Republic of France have placed the money market in a more healthy state The information has however only reached London about an hour or two ago by Electric Telegraph or the markets would have shown a more marked improvement.

CHARLES POTTER.

Since the foregoing was in type we have been favored with the following from the same gentleman, and take pleasure in presenting it to our readers.

NO. III.

London, April 3rd, 1848.

The recent disturbances on the continent have naturally caused some slight stagnation in the English markets. Buyers of foreign commodities have been extremely careful in their purchases; considering it may be supposed that there is no particular inducement for investing in funds where no possibility presents itself of a realization either speedy or remote. To prevent risks therefore, but speculation in foreign articles is carried on, investments being made in things of a greater solidity of character, chiefly English, but which secures a sure if not a quick return. Amongst the more recent topics of conversation is that which refers to the failure of several establishments in the West Indian Trade, the consideration of which subject will be, and indeed has at various intervals been brought before Parliament. Whether these Colonial dependencies should be subjected to the law of free trade or be exempted from its operation is an extremely delicate and intricate question, as it not only involves economical points but the incalculable higher principles of religion and morals.

The present condition of France has shown the first gleams of a depreciation of the currency. The universal dismay which has seized the entire community both in Paris and the provinces, is the best evidence of the estimation in which matters are viewed. The bank of France has suspended cash payments. It is a truism that it is in vain to restrict the amount of the issues of uncontrovertible paper with a view to prevent depreciation under such circumstances. A meeting has lately taken place of the principal changeurs of Paris, and under the pretence of contributing as far as they could to the circulation of silver, agreed that they would pay from that day a premium of two francs and a half per thousand francs for specie, and would charge five francs as a maximum for exchanging notes for silver. Thus within the first week of the announcement of the suspension of cash payments, the notes of the Bank of France are depreciated to the public a half per cent. This notice is only the forerunner of others of a similar kind that we may expect to see issued every week while the present state of disorder continues, and while in spite of all efforts on the part of the government the specie will continue to be hoarded and exported. All experience teaches us that no power or effort that does not restore confidence is capable preventing the disappearance of specie, and the transmission of capital to those countries where it enjoys perfect security. What then, it is asked will become of France under these circumstances. If it were possible that a nation consisting of thirty-five millions of enlightened and industrious people, could continue to drift through the aimless and exhausting policy under which it has suddenly been placed, there could but be one reply to such a question. Exhaustion of its present resources, and a suspension of all reproduction would only lead to poverty and general decay. That such a fate, although the inevitable result of a perseverance in the present policy of the provisional government of Paris awaits France, no one is willing for a moment to believe. The rational hope is that the sounder judgment and more correct appreciation of the bulk of the French people must soon interfere to arrest the rule of contemptible and imbecile disorder, which at this moment prevails ; unfortunately the system of government hitherto pursued in France, finds the country without any means, other than that of a central power in Paris, for giving expression to an opinion, however strong, or force to convictions however general. This is the great source of the uncertainty which now prevails as the failure of France, differing in this respect so much, from the other parts of Europe which are convulsed. Those in whose hands the govenment of France has been placed in the meantime, are fortunately men who, however mistaken in their views and wrong in their policy, are generally believed to have no object beyond the public good, and who would not have had recourse to any desperate means of opposing such a substitution for the present course, as the general interests of the nation strongly indicated. But France at this moment presents the melancholy spectacle of a great and powerful people, and their most lasting interests, sacrificed to the most contemptible indulgence of the passions indolence and momentary gratifications of the most ignorant and least virtuous portion of the people, and who really are very few in number. That this state of things can long continue is impossible, but how or by whom, it is to be remedied is difficult to foresee ; yet so far there are good grounds for hope, inasmuch as the elements at present opposed to order and good government are really so weak and imbecile in themselves, that it may fairly be hoped that the first opportunity which offers for those classes which have really the greatest stake and the greatest indulgence to combine for the common good, such combination will be successfully achieved with little opposition.

I annex as far as I have been able to obtain it, a monthly statement of the stock and supply of sugar and coffee in the six principal markets of Europe ; they are as follows :

SUGAR.

March 1,	1845	1846	1847	1848
	cwts.	*cwts.*	*cwts.*	*cwts.*
Holland* - - - - -	312,000	195,000	395,000	555 000
Antwerp - - - - -	50,000	135,000	75,000	115,000
Hamburg - - - - -	120,000	200,000	55,000	105,000
Trieste - - - - -	50,000	105,000	81,000	200,000
Havre - - - - -	85,000	35,000	5,000	50,000
	617,000	670,000	611,000	1,025,000
England - - - - -	1,399,000	1,128,000	1,071,000	1,941,000
Total - - - - -	2,016,000	1,798,000	1,682,000	2,966,000
Total in G. Brit. of Col. sugar	939,000	730,000	557,000	1,220,000
Total Foreign Sugar - -	1,077,000	1,068,000	1,125,000	1,746,000

Value in the first half of the month of March in London, per cwt. without Duty.

	s	d		s	d	s	d		s	d	s	d		s	d	s	d		s	d
Musco., E. and W. India per cwt	30	0	to	0	0	35	0	to	0	0	35	0	to	0	0	24	0	to	0	0
Havana, white - - -	25	0		32	0	26	0		32	0	31	0		34	0	25	0		30	0
— yellow and brown -	18	0		23	0	18	0		25	0	26	0		30	0	17	0		23	0
Brazil, white - - - -	21	0		24	0	21	0		25	0	27	0		31	0	19	0		23	0
— yellow and brown -	16	0		19	0	17	0		20	0	22	0		26	0	15	0		17	0
Java - - - - - -	16	0		27	0	18	0		33	0	22	0		36	0	15	0		27	0
Patent, crushed in bond -	31	0		0	0	34	0		35	0	35	0		36	0	29	0		0	0

The Stocks in this country of British plantation sugar as well as foreign, have undergone but a slight alteration since the beginning of last month. In the five principal markets of the European continent however, the quantities on hand show an increase of 25 per cent, since then, the largest augmentation being in Holland. It will be seen that the present aggregate stocks of foreign sugar in all the ports are from 50 to 65 per cent in excess of the last three years, and in Great Britain the stock of British plantation sugars was at the same period last year 55 per cent less, and in 1845 and 1846, 25 and 40 per cent smaller than at present. The deliveries for consumption in this country, which were large the first two months of 1847, have not diminished; the official returns are not yet published, but it is found that up to the 11th of last month the deliveries from the principal markets of this country amount to 1,042,810 cwt. against 986,077 cwt. in 1847, consequently about 6 per cent more, besides this there is likewise an increase in the delivery of molasses, which is equivalent to a quantity of 36,000 cwt of sugar. Of foreign sugars as well as Mauritius and Bengal less has been cleared for consumption up to the present time, than in the corresponding period in 1847, this diminution is however more than counterbalanced by the large increase in the quantities of West Indian sugar. The value of most descriptions in England is now about one shilling per cwt. or 5 per cent lower than in the middle of last month, and on the continent of Europe the decline has been almost the same. The produce of our London bond deliveries has maintained its former price.

From this table it appears that the present value of British colonial sugar is from 20 to 25 per cent lower than at the same time in the last three years; foreign lots were considerably dearer last year; in 1846 they were about 10 or 15 per cent higher, but in 1845, prices rated but little above the present sales. The last accounts from the producing countries again report favorably about the crops in Cuba and the Brazils; but less satisfactorily than hitherto with respect to some parts of the island of Porto Rico. As regards the West India (British) Colonies there are the same complaints, not about so unpropitious a season, or a scanty yield, but about pecuniary and social difficulties to secure the crops and bringing them to market. The transactions in foreign sugar have not been of importance in this market during the last few weeks, being almost entirely confined to the requirements for home consumption or of our bond references. The quantity of foreign sugar for home use in this country from the beginning of the year to the present time, is only about half of what was taken during the same period in 1847 by 140,000 cwt. against 269,000 cwt. last year. A few words with respect to Coffee.

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* In first hands *only*; in all other places in first and second.

COFFEE.

March 1,	1845	1846	1847	1848
	cwts.	*cwts.*	*cwts.*	*cwts.*
Holland*	929,000	780,000	783,000	731,000
Antwerp	112,000	48,000	82,000	156,000
Hamburg	160,000	120,000	140,000	140,000
Trieste	84,000	86,000	74,000	112,000
Havre	47,000	31,000	50,000	74,000
England	492,000	398,000	358,000	393,000
Total	1,824,000	1,463,000	1,487,000	1,606,000

Value in the first half of the month of March in London, per cwt. without Duty.

	s	*d*	*s*	*d*	*s*	*d*	*s*	*d*	*s*	*d*	*s*	*d*	*s*	*d*	*s*	*d*
Jamaica, good to fine ord. per cwt	45	0	to 58	0	38	0	to 52	0	42	0	to 50	0	32	0	to 40	0
Ceylon, good ordinary	45	0	48	0	46	0	47	0	43	0	44	0	32	0	33	0
Brazil, good ordinary	29	6	30	0	32	0	33	0	31	6	32	0	30	0	31	0
St Domingo, good ordinary	29	0	29	6	30	6	31	0	31	0	31	6	30	0	31	0
In Holland—Java, gd ord. per ½ kil		22	c.s			22	cts			21	cts			20	cts	

During the first two months of this year the importations of coffee into Europe were larger than for the same time in 1847; the principal surplus shows itself in the large quantities of Rio Coffee, which have been brought to Hamburg, Antwerp and Triste. At the same time the deliveries from the seaports have decreased, in the commencement, owing to the long interruption of the inland navigation, and during the last few weeks through the state of political and financial affairs; in consequence of this, this years total stock appears in the foregoing table about 8 per cent larger than at the same period of the two preceding years, but 12 per cent smaller than in 1846. It must not however be concluded that there is a decrease in the actual consumption of the article, for no doubt the stocks in the interior of the consuming countries are more reduced than they appear to be in the six above named markets. The value of the article is generally now lower than in the begining of the year, when up to the present time the largest transactions have taken place, viz Hamburg and Antwerp; in our markets there has been a fall, not only in those discriptions which are principally taken for consumption in this country, but likewise in those foreign descriptions principally Cost Rica which have been brought into the market although the value of Java Coffee has been nominally maintained in Holland, the next large sales there, which will only take place under favorable auspices, will fix its real value, but this description is already now cheaper than at the same time of the three preceeding years, and if prices should go still lower during the course of next month, there is every probability of a favourable reaction taking place. As soon as the present circumstances which are injurious to trade in general, will have improved, for neither are our total stocks in Europe excessively large, nor are heavier importations to be expected from the producing countries; besides this in consequence of the withdrawal of many orders from the Brazils, and the existence of high insurance premium, they will become dearer, the supply will be delayed and its cost enhanced. In our markets the stocks of coffee amount to about 317,000 cwt. against 287,000 cwt. at the same time last year. The business in the article since the middle of last month has been very limited; notwithstanding this, the exports from this country to the European Continent during the first two months of 1848 have been larger than for the same period in 1847, whereas the deliveries for home consumption are smaller.

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* In first hands only; in all other places in first and second.

[illegible] now proceed to give you some idea of the state of the crops in England. [illegible] the last two or three weeks there has been a succession of wet weather which [illegible] excited some apprehension. As yet however I believe no substantial or per[illegible]t mischief has been done to the growing wheat plant, which through[illegible] the season has been remarkably vigorous without being considered as too [illegible]rd. Upon the light lands and the well drained soils there are no signs of in[illegible] from the wet; and the chief source of apprehension to the occupier of such [illegible]s, is that with the present full and strong plants, too great a growth of straw [illegible] be expected. This is at most a possible and contingent danger which a few [illegible]ks of fine weather might remove. On the undrained clays, where the weak[illegible] of farmer is to be found, the wet weather is causing much anxiety, for [illegible] wheat plant is turning yellow, and with a much larger continuance of wet, will [illegible] extent perish. But here too a few fine weeks would set all to rights, [illegible] there never was a wheat plant that could more easily bear some loss than that [illegible] present season. To the farmer the delay in sowing his spring corn and [illegible]s, and in preparing for roots, which the wet weather has compelled, is at [illegible]t a more serious evil while the agricultural laborers are very extensively [illegible]t of emyloyment from the same cause. Much out-door work has been neces[illegible]ily postponed, till another year, and much of the ordinary routine of cultiva[illegible]n will probably be performed this season in a hurried and imperfect manner. [illegible] Wiltshire some complain too much of wet. This may be true, yet every where [illegible] low grounds have been drenched and flooded, for a time, the wheat plants do [illegible]t seem to have been materially injured. The consequence of the unsettled [illegible]eather in February has been an idle month for farmers as far as tillage is con[illegible]erned. The sowing of spring corn has of late years been gradually in advance, [illegible] regards the period of former seed seasons; arising probably, on the heavier soils from the lands being more generally drained; and on the light lands, from the practice of forcing the sheep sooner and returning them earlier in the spring. Whatever the cause, there is now a desire to sow both pulse and barley at the earliest period the state of the land will permit; but according to present appearances we must this year be content with an old fashioned seed time. During the last two seasons the thicker the crop the more productive it has been, but a wet summer would probably lead to a very different result. Scarcely any check has occurred to the growth during the winter. Some of the earliest sown is therefore very luxuriant, but on the heavy soils the present wet and cold weather will retard its progress—not however in a favorable manner. At present it is nevertheless too early to offer any thing like prediction of the productiveness of the present crops, although it may be mentioned that in several recent years, the wet springs have been followed by the largest produce. It is gratifying to note that during the last few days the weather has become very dry, warm and genial.

From the official returns of the Board of Trade there is observable a very serious decrease in the quantity of wine entered for home consumption in the month of January during the present year as compared with the same month of the year 1846 and 1847, and it is clear that not only has that decreased consumption continued from the end of January to the present time, but that it will continue in an increased ratio until the present exorbitant duty on wine is very materially lessened. The decrease in the quantity of foreign wine (exclusive of Cape,) duty paid since 1846, is no less than 88,861 gallons for the single month of January alone, causing a loss of revenue in that short time, of £23,886 15*s* 6*d*, or equal to about £280,000 a year. The increase in the quantity of foreign and colonial spirits of all kinds duty paid during the same time, is 142,181 gallons. The quantity of foreign wine duty paid was but 459,117 gallons in the whole month of January last. Of foreign and colonial spirits 454,222 besides British spirits. Taking the population of Great Britain and Ireland in round numbers at 30,000,000, the present consumption of foreign wine does not amount to one very small glass a month to each individual. Now where is there another country in the world, consuming all this immense quantity of ardent spirits to this absurdly small quantity of wine. From the commencement of the free trade policy, there have been various reductions in the duty on spirits, but not one farthing has been taken off the duty on wine. The consumption of spirits has in consequence of this lessening of the duty, so greatly increased, that the reduced duties give now a much larger revenue than did the original high duties, whilst the consumption of wine, and the revenue received from it, have fallen to a most alarming sacrifice. Sicere Free Traders did not doubt that the reduction in the duty on brand and Geneva, was a wise measure and one that would benefit alike the merch the revenue, and events have proved the correctness of that opinion. Wh fited the spirit merchant and the revenue, is not likely to be prejudici wine merchant and the revenue, and it is only even handed justice to gi latter the same measure of relief that was extended to the former. To al people of this country to drink their brandy, rum and gin at a cheap r not to allow them to drink their wine at an equally cheap rate, is clearly service to the spirit trade at the expense of the wine trade, and against th wine merchant may justly protest. It would not be difficult to show l trade of this country with Spain, with Portugal, indeed with the whol South of Europe, will benefit by the reduction of the wine duties. The the Board of Trade sufficiently show how the revenue suffers by this pres bitant rate in the constantly diminishing quantity of wine, entered for ho sumption. None doubt that wine is better for the health than spirituou and again the duty having been lowered on one class of beverages, s equally reduced on another; it being clear to every one, that the dealers articles on which the duty has been so lowered, are driving a larger trade fore, whilst the dealers in those articles on which the duty has not been are driving a smaller trade than before—the natural inference being tha vantage to the former is at the cost of the latter.

There has scarcely been any period when the corn market has been s as within the last week or two. The state of the weather as has been ob served, has been such as to excite grave fears of the effect of such conti heavy rains on the prospects of the crops. In many places the wheat suffered and is looking very unhealthy. All farming operations both on arable lands have been suspended, and the preparations for spring grain a weeks later than in ordinary years. In consequence of these circumst grain markets have undergone a further slight advance. If, however, th should be favorable, there is abundance of time to make good all the mis has been done; and therefore it would be premature to calculate on th being affected by these causes. Referring to the effects of a cold wet home our readers may be reminded of the events of 1842. The winter a were both extremely similar to those of the present year; the wheat much injured. Early in June the weather suddenly changed, and be tremely hot, vegetation advanced at a rate seldom seen, and the harve not only abundant but early, the weight of the ear fully compensatin thinness of the ground. After the experience of 1842, we must be ve in drawing a conclusion from bad weather so early in the season. T plant is thick on the ground and the breadth sown is large. A statemen of the week just ended of the corn returns.

	Wheat.		*Barley.*		*Oats.*		*Rye.*		*Bean*	
Sold - qrs	99,689		65,807		28,523		166		7,28	
	s	d	s	d	s	d	s	d	s	
Weekly average Mar. 18	50	4	30	5	20	4	28	6	36	
— — 11	50	2	30	4	20	2	33	4	36	
— — 4	49	11	30	8	20	5	30	5	36	
— Feb. 26	50	2	30	9	20	8	30	3	38	
— — 19	50	11	31	3	21	1	32	4	37	1
— — 12	51	0	31	2	20	7	30	5	38	
Six weeks' average -	50	5	30	9	20	6	30	10	37	
Same time last year -	73	8	53	4	31	11	55	3	53	
Duties - - - -	7	0	2	6	2	6	2	6	2	

GRAIN IMPORTED.

unt of the total quantities of each kind of corn, distinguishing foreign and al, imported into the principal ports of Great Britain, viz:—London, Liv- l, Hull, Newcastle, Bristol, Gloucester, Plymouth, Leith, Glasgow, Dun- nd Perth,

In the week ending March 15, 1848.

	Wheat and wheat flour	Barley and barley meal	Oats and oat meal	Rye and rye meal	Peas	Beans	Indian corn and Indian meal	Buck-wheat & buckwht meal
	qrs	qrs	qrs	qrs	qrs	qrs	qrs	qrs
l -	32,945	8,359	11,014		1,525	6,628	12,812	
l -	628							
l -	33,573	8,359	11,014		1,525	6,628	12,812	

Total imports of the week - - - - - - 73,912

funds opened this morning at a slight improvement upon the average prices ure, Consols 83 ; Reduced Three per cents 82½ ; Three and a quarter per 3 ; Exchequer bills 25s to 29s premium ; India Bonds par to 5s premium. annuities 8-13-16 to ¼. Bank Stock 193. The cause of this heaviness is to the disturbed state of the Continent, and more particularly the financial ssments daily surrounding the government of Paris. The following has n issued from the Bank of England.

BANK OF ENGLAND.

count, pursuant to the Act 7th and 8th Victoria, cap 32, for the week ending on Saturday, the 4th day of March, 1848.

ISSUE DEPARTMENT.

ssued - - -	£28,205,830	Government Debt -	£11,015,100
		Other Securities - -	2,984,900
		Gold Coin and Bullion - -	12,76[illegible],592
		Silver Bullion - - -	1,443,328
	£28,205,830		£28,205,830

Dated the 9th day of March, 1848.
M. MARSHALL, Chief Cashier

BANKING DEPARTMENT.

tors' Capital -	£14,553,000	Government Securities (including Dead Weight Annuity - -	£11,574,921
- - - - ,	3,980,840	Other Securities - -	13,115,456
Deposits (including hequer, Savings banks missioners of National t, and Dividend Accounts,) - - -	6,564,785	Notes - - - -	9,830,215
Deposits - -	9,249,804	Gold and Siver Coin - -	668,097
Day and other Bills -	830,260		
	£35,188,689		£35,188,689

Respectfully, &c.,
CHARLES POTTFR.

JOURNAL OF MINING AND RAILROADS.

NO. I. RAILROADS IN GREAT BRITAIN.

There are in Great Britain three thousand five hundred and forty-nine Railroad in operation. The amount of capital invested in these is £113, equivalent to $550,706,802 52. This is an average cost per mile of £32,6 valent to $157,996 96. The longest road is the London and North-West ing 428 miles, and which cost £21,513, 354, equivalent to $104,114,633 is an average of about £50,265 per mile, equivalent to $243,282 60.

The two most costly railroads in the United States are the Boston and W and the Boston and Lowell. The Boston and Worcester road is 44⅝ miles in and has a double track. There are 14 miles of branches owned by it, which ha a single track. The whole cost of this road and its branches, exclusive of equi has been $3,767,938 02. This is an average of $64,271 86 per mile. It must be bered, however, that in this estimate are included the fourteen miles that have single track. The Boston and Lowell Road is 25¼ miles in length, and has a track. It has a branch 1¼ miles in length of a single track. The whole this road and its branch, exclusive of equipment, has been $1,807,101 93. is an average of $68,196 30 per mile. There are several causes which hav the construction of Railroads in Great Britain more expensive than in ou try. Economy in building has not been so much an object there as w Their roads are more durable than ours, more costly in their structure, grade, and straighter. In addition to this, land damages are far heavier than in any part of the United States. This, indeed, is one of the princip in the excess of cost. Roads, however, are now built in both countri much less rate than formerly. We, with our usual propensity to get t out of the limited capital we are enabled to employ for objects of great en have studied the art of building railroads cheaply, it has become with us science. Determined to possess their advantages as widely as our interest necessities may seem to demand, we have sought to accomplish this, not by increasing the capital to be expended as by multiplying its power. wonderful with what result We understand that the cost of constructi ty-seven miles of the Boston, Concord and Montreal Railroad, to be com June next, will be less than an average of $15,000 per mile. And the r said, is as well built as any in the country. This shows what Yankee e and thrift can do.

ENGLISH RAILWAYS.

Name of Railway.	Length R'lway	Present actual cost.	Price per shar
Arbroath and Forfar - - - - -	16	£179,939	25½
Birkenhead, Lancashire and Cheshire -	15	706,993	38¼
Caledonian - - - - - - -	130	3,594,470	29⅜
Dublin and Drogheda - - - - -	35	733,655	52
Dublin and Kingstown - - -	7¾	473,282	—
Dundee, Perth, and Aberdeen Junction	47½	285,745	30
East Anglian (Lynn to Ely) - -	55½	1,062,742	8⅜
East Lancashire - - - - - -	24	1,733,915	20
Eastern Counties - - - - -	221¾	7,698,370	13¾
Eastern Union - - - - - -	50	979,926	80
Edinburgh and Glasgow - - -	53	2,374,745	35
Edinburgh and Northern - - - -	29	953,207	18
Glasgow, Paisley, and Ayr - -	64½	1,890,547	85¾
Glasgow, Paisley, and Greenoch - -	23	838,964	16
Great Southern and Western Ireland -	110¼	1,876,326	19½
Great Western - - - - - -	281¾	10,970,636	95
Kendal and Windermere - - -	10¼	169,888	23
Lancaster and Carlisle - - - - -	70	1,395,193	49
Lancashire and Yorkshire - - -	124¼	6,807,314	88½
London and North Western - -	428	21,513,354	134
London and Blackwall - - - - -	4	1,146,289	5
London, Brighton and South Coast -	152½	6,086,822	30¾

Names of Railway	Length R'lway	Present actual cost.	Price per share	Last Div.
London and South Western - -	189	6,264,164	49	8
Londonderry and Enniskillen - -	14½	160,013	16	—
Manchester, Sheffield and Lincolnshire	46	2,336,624	80	5
Maryport and Carlisle - - -	28	424,417	39	3
Midland Company - - - -	402½	8,158,604	104	7
Midland Great Western (Irish) - -	36½	583,776	10½	—
Newcastle and Carlisle - - - -	66¼	1,184,080	101⅓	6
Norfolk - - - - - -	81¾	1,375,633	65	6
North British - - - - -	78	2,514,150	23	5
Shrewsbury and Chester - - -	17	591,158	17	—
South Devon - - - - -	29	1,339,860	20	—
South Eastern - - - - -	165½	6,398,218	27	6
Taff Vale - - - - - -	38	785,607	—	5⅓
Ulster - - - - - - -	25	646,211	52	6
Whitehaven Junction - - - -	12	147,095	—	6
York, Newcastle and Berwick - -	236½	3,685,102	30	9
York and North Midland - - -	230½	3,196,869	67	10
CONTINENTAL RAILWAY.				
Amiens and Boulogne - - - -	68¼	573,388	8¼	4
Antwerp to Ghent (monthly) - -	31	——	—	—
Belgian - - - ditto - -	—	——	—	—
Dutch Rhenish - - - - -	57¼	——	1	—
Northern of France - - - -	211	2,000,000	4¼	4
Orleans to Bourgeis (Central) - -	107½	——	—	—
Orleans to Tours - - - -	72	600,000	32⅞	4
Paris and Orleans - - - -	82	2,011,720	47½	12¼
Paris and Rouen - - - - -	85	2,082,916	24	11⅜
Rouen and Havre - - - - -	59½	——	10½	4
Strasburgh and Basle (monthly) - -	88	——	6	1⅞
West Flanders - - ditto - -	—	——	1¼	—

NO. II. COMPARATIVE FARES OF RAILROADS IN THE UNITED STATES.

As the comparative rates of fare on railroads is a subject of some interest, we avail ourselves of the labors of Mr. Minor, the industrious editor of the American Railroad Journal, as exhibited in the following tabular statement of the principal railroads in the United States, giving their length, through fare, and rate, per mile, from which it will be seen that the New York and Erie Railroad charges the lowest rate, namely, 1.72 cents per mile; the Harlem next, and then the Long Island Railroad. The New England roads all range below three cents, except the New Haven, Hartford, and Springfield, which is one-tenth over. And the next lowest, after the New England roads, is the Weldon and Wilmington, N. C., which is a fraction less than 2¼ cents—quite too low for a country so thinly populated, though high enough for many of the more northern lines.

From this statement, it will be seen that the railroads in the State of New York, diverging from the city of New York, charge lower rates than any other roads in the country; and we presume the managers of these roads have been influenced by the belief that, where there is a dense, and to a certain extent, confined population, the true plan is to put the rates of fare low, and thus induce the masses to use the road. This, we are fully convinced, is the true policy, and we believe it will ultimately prevail.

Name, Commencement and Termination.	Length. Miles.	Thro' fare. $ cts.	Cents per mile
Eastern Railroads—Boston to Portland - - -	105	3 00	2·85
Boston and Maine—Boston to Portland, - - -	110	3 00	2·72
" Lowell—Boston to Lowell, - - -	26	0 65	2·50
" Worcester—Boston to Worcester, - -	44	1 25	2·80
" Providence—Boston to Providence, - -	42	1 25	2·97
Fitchburgh—Boston to Baldwinsville, - - -	71	1 75	2·46

Name, Commencement, and Termination.	Length.	Thro' fare		Cents.
	Miles.	$	cts	per mile.
Fall River—Boston to Fall River,	53	1	35	2·54
Old Colony—Boston to Plymouth,	37½	1	00	2·66
Western—Worcester to Albany,	156	3	75	2·27
Nashua and Lowell—Lowell and Nashua,	15	0	40	2·66
Concord—Nashua to Concord,	34	0	80	2·35
Norwich and Worcester,	60	1	50	2·50
New Haven and Springfield,	62	1	87	3·00
Bridgeport,	98	2	00	2·04
New York and Harlem,	53	1	00	1·88
New York and Erie,	87	1	50	1·72
Long Island,	95	2	00	2·10
Camden and Amboy—New York to Philadelphia,	90	3	00	3·33
New York and New Brunswick,	33	0	75	2·27
" Philadelphia,	88	4	00	4·54
Reading—Philadelphia and Pottsville,	92	3	00	3·26
Philadelphia and Baltimore,	97	3	00	3·01
Westchester and Columbia,	32	0	75	2·34
Philadelphia, Lancaster and Harrisburg,	107	4	00	3·73
Philadelphia, Germantown, and Norristown,	17	0	40	2·38
Harrisburg and Chambersburg,	56	2	12	3·78
Baltimore and Ohio—Baltimore to Cumberland,	179	7	00	3·91
" Washington,	40	1	60	4·00
" Susquehanna,	71	2	13	3·00
Washington and Richmond, (including porterage,)	133	5	50	4·13
Louisa—Gordonsville,	50	3	25	6·50
Richmond to Petersburgh,	2 ½	1	00	4·34
Winchester and Potomac,	32	2	00	·925
Petersburg and Roanoke—Weldon,	63	3	00	4·76
Weldon to Wilmington	161½	4	00	2·48
Wilmingtom to Charleston by steamboat,	——	4	00	——
Gaston and Raleigh,	87	4	00	4·60
South Carolina—Charleston to Augusta,	136	6	75	4·96
Columbia—Branchville to Columbia,	68	3	38	4·97
Georgia—Augusta to Atlanta,	171	7	09	4·09
Athens Branch,	39	1	95	5·00
Western and Atlantic—Dalton,	100	5	00	5·00
Central Savannah to Macon,	191	7	00	3·65
Macon and Western—Atlanta,	101	4	00	3·96
Montgomery and West Point,	60	3	00	5·00
Vicksburg and Jackson,	47	3	00	6·38
Albany and Schenectady	17	0	50	2·94
Greenbush and Troy,	6	0	20	3·33
Troy and Schenectady,	20½	0	50	2·43
Utica and Schenectady,	78	3	00	3·84
Utica and Syracuse,	53	2	00	3·77
Syracuse and Auburn,	26	1	00	3·84
Auburn and Rochester,	77	3	00	3·89
Rochester and Attica,	44	1	56	3·54
Attica and Buffalo,	31½	0	94	2·98
Buffalo and Niagara Falls,	22	0	75	3·40
Lockport and Niagara Falls,	24	0	75	3·12
Michigan Central—Detroit to Kalamazoo,	146	4	40	3·00
Detroit and Pontiac,	25	1	00	4·00
Erie and Kalamazoo— Toledo to Adrian,	33	1	00	3·00
Southern Michigan—Monroe to Hillsdale,	70	2	00	2·85
Mad River—Sandusky to Bellefontaine,	102	3	25	3·18
Little Miami—Cincinnati to Springfield	84	2	00	2·38
Lexington and Ohio,	28	1	25	4·46
Mansfield and Sandusky,	56	1	50	2·67
Madison and Indianapolis,	86	3	00	3·49

Huut's Mer. Mag.

NO. III.—RAILROADS FROM BOSTON.

ollowing table exhibits the amount of capital invested in the seven rail-
hich terminate in that city. The aggregate length of these seven roads is
les. The length of the respective roads, as given in the table, is exclusive
ches, and exclusive of connecting lines of railroad, constructed by the com-
, by means of which these routes are all, with one exception, extended in-
adjoining States. The amount of capital paid in, as here stated, exhibits
nearly the cost of the respective roads, including that of stations and ma-
ry, exclusive of branches, than the total of expenditures by the respective
anies.

e table shows also the receipts of income by the respective companies, during
ast year, as reported in the late sworn annual return; the expenses of the
of dividend paid. It shows also the number of miles travelled, by trains
n by locomotive engines, on each of the roads; the number of passengers, and
ons of freight transported on each, and the average of income per mile on each
.

e shall take another opportunity to present a condensed statement of the
, business and income, of the more extended lines of railroad in the State.

	Capital paid in.	Income.	Expenses.	Net Income.	Div. p. c.
d Colony - - -	$1,199,300	$171,153	$87,020	$84,133	6½
& Prov. - - -	2,520,000	362,328	175,646	187,982	7½
& Worces. - -	3,500,000	722,170	381,985	340,185	10
& Lowell - - -	1,800,000	448,555	253,408	195,147	8
itchburg - - -	2,335,900	384,444	161,433	223,011	10
& Maine - - -	2,601,391	511,504	220,959	291,245	9
ast. & N. H. - -	2,732,500	424,840	160,083	264,757	8
Total - -	$16,689,091	3,025,994	1,439,534	1,586,460	

	Length miles.	Miles run.	No. of Passengers.	Tons Freight.	Income pr. mile
Old Colony - - -	37	152,693	389,994	42,707	$4,626
B. & Prov - - -	41†	226,261	487,478	87,605	861
B. & Worces. - -	44½*	405,155	569,305	283,718	16,184
B. & Lowell -	26*	250,546	484,683	281,441	17,252
Fitchburg - - -	50¼	256,809	494,035	214,176	7,631
B. & Maine - - -	73	324,281	728,307	120,428	7,007
East & N H. - -	53‡	241,531	892,896	41,047	8,016
Total - - - -	325	1,857,276	4,075,968	1,101,422	

NO. IV.—RAILROAD MATTERS.

There were transported over the Philadelphia and Reading railroad during March last, 188,898 tons of coal—being the largest amount ever transported in the same time since the opening of that road; and as compared with the same month of 1847, shows an increase of 111,104 tons—the total for that month being but 77,794 tons. The largest amount of coal carried in any one month last year, was 150,061 tons, brought down during the month of August.

A large and highly respectable meeting of the citizens of Charleston, with the mayor in the chair, resolved unanimously in favor of pledging the credit of that city to the amount of five hundred thousand dollars, to aid in the construction of the road from Chattanooga to Nashville. This subscription to the stock of the company, it is said, will ensure the completion of the work.

The Coosa River Journal informs us that the branch road from Kingston to Rome will be opened to a point within about seven miles of Rome, by the first of June, and the entire work will be finished in the course of the coming summer.

The Milledgeville Recorder mentions the fact that at a recent meeting of th board of directors of the Milledgeville and Gordon railroad company, it was una nimously determined to put the road under contract, at an early day. The prospect is that it will be commenced in about a month.

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* Double track. † 15½ miles double track.

‡ 16 miles double track. Portions of the other roads above named consisting of double tra to the extent in all of about 112 miles.

It has been calculated that Massachusetts had expended, at the end of 18[illegible], very nearly fourteen millions of dollars in the construction of railroads in her borders. These are not yet all finished, but we are informed that three-fifths of them paid in eight per cent. dividend last year.

The election of a new board of directors for the New York and Harlem railroad company takes place in a few weeks, and as material changes are said to be contemplated, it becomes necessary for the party favoring such changes, to hold a majority of the stock. This accounts, says the New York Pathfinder, for the increased activity of that stock, and the large investments that have been made by some few individuals.

The earnings of the Long Island railroad for the month of March, show a gain of 15 per cent. over the same month of last year, and although the freight business is smaller, much more has been done in the passenger travel.

The receipts of the New York and Erie road for March were $23,160—being an increase of $3,034 over those in the same month of last year.

The Chicago Journal says that the contracts for the grading and bridging of the first 39 miles of the Chicago and Galena Union railroad are already made, and adds, "we should not be greatly surprised if we found ourselves riding out ten or fifteen miles towards Galena on this track about the fourth of next July."

The general railroad bill which was passed by the legislature of New York, authorizes the formation of companies, and the construction of railroads in any portion of the State where land can be procured for the purpose. The land to be valued by referees, and in all cases those referees to be appointed by the town or city authorities though which the road may pass.

The Albany and Cohoes railroad bill has been passed, and the company have obtained power to continue their road as far as Waterford.

A railroad is to be constructed between the towns of Lawrence and Manchester in New Hampshire.

The Massachusetts legislature have granted a charter for a railroad between Salem and Lowell.

MISCELLANIES.

NO. I.—THE MONEY CRISIS IN ENGLAND—EFFECT OF BANKS ON COMMERCE—THE CONSTITUTIONAL TREASURY.

The terrible crisis, which has not yet fully run its course in England, is the result of bad legislation, by which the will and caprice of a few men at the head of a great corporation have been substituted to the free and healthy action of the natural laws of trade. Among the different kinds of capital which constitute the wealth of a nation, those called fixed and floating capital bear most directly upon its productive industry. The former consists in the value of buildings, machinery, farms, and the like. The latter, which may be properly called commercial capital, is that portion of all kinds of merchandize—among which the precious metals—the value of which are employed and absorbed reproductively in commerce, manufactures and agriculture. All that portion of merchandize, whose value is reserved by those who possess it for absolute consumption, to supply their current personal wants is not capital, but income. Capital is the value which is absorbed reproductively; the value which being consumed in one shape, is made to re-appear and increase in another—income, the value of which is absorbed, destroyed absolutely and without return. The former is a means of production, the latter of consumption. Floating capital is nearly the only kind available in commerce, and it performs half the functions in manufactures; and its supply and demand regulates the rate of interest—which is the rent of commercial capital—as the supply and demand of fixed capital regulates the rent of buildings, farms, &c. After these few remarks it becomes evident that if, from any cause, a considerable portion of the floating capital of a nation is absorbed to produce fixed capital, its diminished supply must raise the rate of interest so as seriously to affect commerce and manufactures; and this state of things must necessarily continue until the industry and savings of the country have replaced the capital, whose nature has been entirely changed, or commerce and manufactures are reduced to the level of the supply of floating capital. So far as commerce and manufactures are concerned, the immense capital absorbed by railroads, might as well have been entirely destroyed. The failure of the crops has but partially contributed to the crisis, for could the orders from this side have been filled, the reduction of duties on British goods by our last tariff and the great prosperity of our country, presented extraordinary facilities to England for meeting her increased imports by corresponding exports, for changing her labor against our labor.

The question now arises what can have produced these enormous speculations in railroads and consequent misdirection of capital? That fault must be charged to the dangerous elasticity of the bank credit system. Sir Robert Peel after witnessing the immense mischief produced by the action of the Bank of England in 1839, provided by his bill of 1844, against the over emission of notes by the issue department, but he entirely neglected to guard against the undue emission of deposits by the banking department of the bank; and yet both have precisely the same effect in inflating the currency. In fact it amounts to the same thing, whether the bank issue two pounds in paper on one in gold in its vaults, or whether it issue only one pound and then put it out again a second time, after it returns on deposit—in either case its cash liabilities are swelled to double the amount of its cash assets; and the circulation is increased equally in both cases; for a deposit, payable on demand, forms a part of the circulation: it is cash on hand to the depositor. Now, it results from this that whenever the course of trade brings an addition of precious metals into the country, the free use of the increased deposits gives an unhealthy stimulation to credit and excites speculation, which, when fairly started, knows no bounds, but the ability to borrow. The bank loans must finally reach their maximum, whilst the demand for money continues very active, to meet the vast increase of individual engagements, always resulting from inflated credit; the rate of interest then runs up rapidly, and induces the depositors to withdraw a great portion of their funds; immediate contraction becomes necessary to the safety of banks, and the crisis begins. Thus, the influx of specie into the country, which is generally the result of prosperous legitimate business, is changed, by the action of the banks, into a source of disaster, and national prosperity is ever made the forerunner of national distress. Such is the history of all commercial revulsions; their frequency is always in proportion to the dependence of the general business of the country upon banks; and their intensity depends principally upon the direction which speculation happens to take; whether it runs on fixed values, when the nature of the floating capital employed is entirely changed, or upon commercial articles, when the reduction of commercial capital is only the difference between their real value and the fictitious price to which speculation has carried them for a time. This may serve to explain the greater severity of the present crisis, when compared with that of 1839. Sir Robert Peel admits that the charter of the bank requires further revision. If he intends to prune it down until it works well at all times, he is very likely to find, by the time he has done with it, that there is amazingly little of it left.

Whoever has observed that an extention of the currency is invariably followed by a disproportionate increase of individual engagements; that the facility to meet these engagements depends on the amount of the currency at the time they fall due, and that this amount is entirely regulated by the Banks, can form an adequate idea of the terrible power conferred on the managers of these institutions. In this country, we have no means to ascertain the proportion which the currency bears to the amount of individual bills afloat, and its effect upon speculation; but in England, where no bill is recoverable at law without the stamp, and a duty is charged proportionate to the amount of the bill, the sum of bills outstanding is easily estimated by the stamps issued. These bills average three months; and therefore, one-fourth of the stamps issued during the year, gives the amount of bills afloat. The official returns from 1837 to 1839 inclusive, present the following results, viz.:

	Stamps Issued.	Bills afloat.
1837 - - -	£455,084,445	£113,771,111
1838 - - -	465,504,041	116,376,010
1839 - - -	528,493,842	132,123,460

During that time, the movement of the Bank of England was as follows:

		Bank Issues;	Bullion in Bank.
1837—January	-	£17,422,000	£4,287,000
1838—September	-	19,665,000	9,614,000
1839—December	-	16,366,000	2,887,000

We see from this that an increase of £2,100,000 in the circulation of the Bank, from 1837 to September 1838, was followed by an increase of individual bills afloat in 1839 to the enormous amount of fifteen and a half million sterling, and that by the time these bills were falling due, the circulation was actually less by £1,100,000 than at the beginning of 1837, before the increase of individual engagements commenced. The artificial medium of payment being thus withdrawn, ruin and bankruptcy followed as a matter of course.

A scarcity of money, and a kind of panic, has existed in our large commercial cities for the last two months, partly from the commercial situation of England, and the discredit of sterling bills, which has rendered for a time unavailable the floating capital against which these bills are drawn; but principally from the improvident course of the Banks—those of New York in particular. During the whole of last year, it was very evident that, sooner or later, the affairs in England must, to some extent, react upon this country. As far back as the month of August, the Banks were warned, by the course exchanges began to take, to prepare and strengthen themselves by gradual curtailments. The amount of commercial engagements would have been insensibly reduced, and the pressure avoided. But no heed was taken, and although the specie in their vaults fell off one-fourth from the beginning of August to November, their lines of discount continued up to that time, at an amount never before reached—and it must be remembered that a good portion of these loans were on fancy stocks—a species of security probably so called because their value is all in fancy. At that time, the Banks became suddenly alarmed at the continued exports of specie, and at once refused to loan a dollar on the best commercial paper, which had to be sold in the street at 1½ and 2 per cent. per month. Speculators play a high game at any rate, and it is only playing a little higher to pay exorbitant interest; but the regular dealer is absolutely ruined by such rates. The previous prosperity of the country, and the general soundness of commercial firms, has enabled them, so far, to bear the shock, but not without great sacrifices. However, we may well thank the much-abused Sub-Treasury that matters are not worse. There cannot now remain a doubt, that with the Government deposits for an additional means of expansion by the Banks, we should have witnessed a repetition of the events of 1839—'41. Although that law cannot entirely prevent inflations, because its check is only partial, we need not fear any very serious derangement of the currency whilst it remains in force. Its repeal has been advocated in certain quarters to facilitate the negotiation of Government Loans. Far better, and indeed cheaper, to pay a little more for such loans; for nothing costs dearer to the country than commercial revolutions.

W.

NO. II.—RELATIVE COST OF STEAM AND WATER POWER.

In a pamphlet recently issued at Louisville on "The Relative cost of Steam and Water Power: the Illinois Coal Fields, and the advantages offered by the West, particularly on the Lower Ohio, for Manufacturing," there is much information grouped, establishing the superiority of steam over water power, for machinery on a large scale. We extract so much as will give the argument, supported by figures.

We deem the present a suitable time to introduce the subject to our readers, in view of the establishments now in progress in the South and West, for manufacturing. Among the Cotton Mills lately put in operation, under favorable auspices, is one at Tuscaloosa, Alabama, owned by the "Warrior Manufacturing Company." When the building is filled, as it will soon be, it will contain at least 6,000 spindles and 150 looms. The working has begun with a less quantity, but orders are in process of execution at the North for the entire amount. Steam is used, from coal taken from the inexhaustible bed in the vicinity. White labor is also employed in the establishment.

The satisfaction given by the starting of this mill, has encouraged other investments of the same kind; and we learn that a wealthy citizen of Tuscaloosa County has closed a contract for machinery to be delivered next fall, on estimates of $50,000, himself the sole owner. Companies have been formed, and others will follow, under the general charter law of the State for such objects. Individuals have only to specify in writing, the name, capital and purposes of their company, to secure the privileges of incorporation,—the instrument to be recorded in the office of the clerk of the county court.

But, we did not intend to dwell on the prospects of any one place in the manufacturing enterprise. Our object, mainly was to show that steam was preferable to water as a motive power for cotton mills. To this end, we quote from the pamphlet alluded to, which is based on calculations for the country on the Ohio, but not less applicable to other sections where coal may be obtained cheaply, as in Alabama.

Here are the promised extracts:

A cotton mill of ten thousand spindles will turn out two tons of goods a day—say six hundred tons per annum; 100 pounds of cotton will average 89 pounds of cloth; 666 tons of cotton are therefore required by the mill; 1,266 tons cost, aside from drayage, (a considerable item,) $2,532 in transportation between the mills and where the goods are sold. Aside from the extra cost of water-power, this mill would require a capital of not over $250,000—perhaps $200,000 would be sufficient. This item then is 1 or 1¼ per cent. on the capital invested. Mr. Montgomery, in his work (published in 1840,) on the comparative cost of manufacturing in England and America, says:

"The attention of manufacturers in New England has been for some time directed to the advantages of steam as a means of propelling machinery, *the advantages of a good location being considered equal to the extra expense of steam power.*"

Another important item of expense avoided, by a steam factory, is that of heating the mill. Mr. Montgomery gives the average cost of this at $467 80 per annum for a mill of say 4,000 spindles. Six hundred dollars per annum may then be put down as cost of heating a mill of 10,000 spindles. And it is not only necessary that the atmosphere in the mill should be at the proper degree of temperature but of the proper dampness, so that the threads shall run smoothly. Both purposes require a large part of the fuel and machinery used in a steam mill.

The foregoing are not all, but are the most important difficulties attending the use of water power for cotton and woolen factories. Most of the difficulties are found wherever this power is applied; and, as a general rule among engineers, at any position where coal can be had at 10 cents a bushel, steam is as cheap as water power at its minimum cost. Such is the theory. The facts seem to be beyond this; for in New England, where water power is so abundant, the largest cotton factories, now being erected, are to have steam as a motive power; of this character are the Naumkeag mill at Salem, and that at Portsmouth; the first of 40,000 and the last of 50,000 spindles, and these are the largest in the world. At Fall River, Bristol and Newport, steam factories are in successful operation. The fine goods of the Bartlett steam mills at Newburyport, have a wide reputation. The recent erection of the James Mill, at the same place, shows the success of the former; and within the last year the escape steam of a new mill at Lowell is drowning the noise of the falls of the Merrimack. Let it be remembered that coal in New England costs, on an average, twenty-three cents per bushel.

As before stated, the water power at Lowell now costs $5 a spindle; $50,000 of capital is to be invested in power to run a mill of 10,000 spindles.

The interest on this, per annum, is - - -	$3,000
Now add the cost of heating the mill - - -	600
And the cost of transportation - - -	2,532
And you have one side of the equation as against steam	$6,132

I cannot fix with precise accuracy the steam power and fuel required for a mill of 10,000 spindles. The only authority before me gives this estimate for one of 3,700 spindles, with the necessary machinery for preparing the cotton and manufacturing the cloth: A high pressure engine of 40 horse power—length of stroke 4 feet, diameter of cylinder 1 foot—makes 40 single or 20 double strokes per minute; three or four round boilers, 15 feet long by 2½ feet in diameter, requir

900 gallons of water, and consuming 1¼ chaldrons (45 bushels,) of bituminous coal per day—pressure of steam sixty-eight pounds to the square inch. To do double the work does not, as I am told, require double the power and nothing like double the fuel. This estimate was made eight or nine years since; within that time very important improvements have been made in the application of steam power and the use of fuel; and probably I may safely say that an engine of 90 horse power, requiring 80 bushels of coal, a day, is sufficient for the mill of 10,000 spindles.

Then 80 bushels coal for 300 days at 23 cents per bushel - - - - - - - -	$5,520 00
Add salary of engineer - - - - -	500 00
	6,020 00

Showing an advantage in favor of steam, *from coal at twenty-three cents a bushel*, of $112 per annum. The cost of an engine of 90 horse power, boilers, belting pipes, &c., not required for the purposes specified in the other, would be probably not over $9,000, while the cost of communicating the water power to the machinery would be at least 17,000. Montgomery, in the work already quoted from, states the cost of two water wheels, equal to eighty horse power, including gearing, gates, shafting, belting, &c., at $17,000. The Tremont and Suffolk mills at Lowell, contain 12,000 spindles, make coarse goods, and have six water wheels, the cost of each wheel between $3,000 and $3,500, entirely exclusive of the cost of excavating and walling up the branch canals to and from the mills.

It is a mooted question, which will last the longer, the wheels or the engine; but give $3,000 to equal the difference, and there is the interest of $5,000 to add to the advantage before stated.

After refering to the cost of working cotton mills in Great Britan, and the New England States, and pointing out the reduced scale of expenses in the coal region, the author of the pamphlet presents the following

SUMMARY

Of the advantages of manufacturing cotton where the seams of the Illinois coal field are cut by the lower Ohio

We have the following data as elements of the calculation.

A mill of 10,000 spindles will consume 666 tons of cotton, make 600 tons of cloth, and use 24.000 bushels of coal, 2,530 gallons of oil and 46,000 lbs. starch per annum; it will require of operatives 25 men and boys and 200 females, whose wages will average the Lowell prices—say males 80 cents per diem and females $2 per week besides board, or males $6,000, females $20,800 per annum. The average prices of board at Lowell are per week for males $1 75 and for females $1 25—or total per annum $17,375.

It is safe to assume that the prices of board on the lower Ohio would be one-third less than at Lowell where a sirloin of beef costs from 15 to 16 cents the pound, potatoes from 60 cents to $1 per bushel, and most of the other articles of food in the same proportion. It will be remembered that the rents of the boarding houses at Lowell, are regulated by a "sliding scale" and are dependent on the general prices of food—sometimes these have, as is said, been entirely abated, and the boarding house keepers have received gratuities from the corporation, so as to make a living without changing the prices of board—and it is fair, therefore, t include the cost of board as a part of the wages paid by the corporations.

We have before, on page 22, average saving in cost of transportation and interest on difference of capital - - - -	$44,182 80
Add difference of one-third in cost of board on $17,375 - -	5,791 06
Add difference of 19 cents per bushel on 24,000 bushels coal, -	4,560 00
Total saving per annum, - - - - - - - - - -	54,533 86
Deduct $1 50 per ton, supposing the goods are to be sold at Louisville, St. Louis or Memphis, - - - - - - - -	900 00
	$53,633 86

If, to save all cavil, we deduct 3 per cent to cover interest, insurance and commission on sales at these cities on 4,000,000 yards at 8 cents—or $320,000, - - - - - - - -	53,638 86 9,000,00
	$44,633 86

If lard oil is used we have the advantage of 15 cents per gall.—but if the use of erm oil is continued, we pay an advanced price of 15 cts. per gal. or $379 50. e should, however, save about 1 cent per lb. in price of starch or $460 and in our, wood, gas (or lard oil for lamps) probably $600 per annum.

We have a clear saving of over 22 per cent on $200,000, which is an ample apital.

I am informed by those who have the means of knowing the fact, that the averge dividends declared on cotton mills controlled in Boston have been 14 per cent r the last five years—but I am not advised of the amount of earnings in these ills that has been added to surplus funds, or invested in new machinery, improveents, property or new stocks.

As the new city of Lawrence is growing with magical rapidity and new cotton ills are in progress of erection all over the New England seaboard, notwithstandg the changes in the tariff and the desperate struggles of the English manufacrer to drive us out of foreign markets, (so desperate that brown cottons have een sold cheaper at Calcutta than their cost in Manchester;) and as we know hat the bank and railroad dividends in New England will average 8 per cent, it ill not be considered an over estimate to put this average on our capital to the avings above: or 16,000 plus 44,633 86—$60,633 86 or over 30 per cent dividends o be reasonably expected from our mills.

If the *maximum* of advantages is taken and added to 20 per cent average of earnngs of eastern mills (and it is believed that this calculation would be nearer the ruth) the estimated profits here would be so enormous that western men could carcely be brought to believe the accuracy of the calculations without the severst tests of experience.

Several months since and before these articles were written, I sent the results to friend and practical manufacturer of cotton on the Ohio. His answer was this -"An Irish laborer once wrote home to his friends that he got meat for his meals hree times a week: why, you lying dog, said his employer, do you not get meat hree times a day and every day? Yes said the laborer, but I want my friends to ome and join me—meat three times a week will bring them here, but if I promise t three times a day, they won't believe a word of it."

Another practical manufacturer in the West writes to me that the calculations re substantially correct and the results within the truth, but that a model mill, on he Lowell system, is required to convince the western capitalists of these truths.

NO. III.—GERMANY.

The example of France, stripping monarchy of power, and affecting the right f the people to govern, has already drawn concessions to the popular demand, rom many sovereigns in Europe, to be followed, no doubt, by still greater, or by he uprising of the people. Our object here, is not to comment on this state of hings, however strongly we desire the success of liberal principles throughout the orld; but merely to introduce two statistical tables from Prof. Darby, concerning he German States, which we deem interesting, in connection with the following atent of the King of Prussia, convoking the United Diet:

"We, Frederick William, by the grace of God King of Prussia, &c., have, in onjunction with the Imperial Government of Austria, invited our German conederates to assemble immediately for general consultation respecting those meaures which are called for by present events, so fraught with difficulty and so dangerous to the weal of our fatherland.

"We are resolved to strive with all our energy that these consultations may ead to an actual regeneration of the German Confederation; so that the German eople, fundamentally united by strengthened free institutions, and at the same time protected from the dangers of discord and anarchy, may regain its ancient grandeur and assume its proper rank in Europe. Whatever be the result of our exertions, measures will, in any case, be taken to consolidate our kingdom and dominions, for the execution of which we require the co-operation of our faithful States. For these reasons, and because in great and momentous epochs like the present, we can only feel strong in conjunction with our States, we have resolved to open the United Diet on Thursday, the 27th of April, in our capital and residences of Berlin.

"Given at Berlin, March 14, 1848.

"FREDERICK WILLIAM."

No 1.—*Table of the Political Sections of those parts of Germany having each its own Government.*

		Extent in English sq miles.	Aggregate Population.	Population to the square mile.
Bavaria, Kingdom - - - - -		20,621	3,960,000	192
Wurtemburg, Kingdom - - -		8,020	1,520,000	190
Grand Duchy of Baden - - -		4,150	1,130,000	270
Hohenzollem Sigmaringen - - -		138	38,000	275
Hohenzollem Heckengen - - -		107	15,000	140
Hesse Darmstadt - - - -		3,753	700,000	187
Hesse Electoral - - - -		4,442	500,000	132
Hesse Hombourg - - - -		161	20,000	124
Nassau - - - - - - -		1,923	337,000	175
Saxe Weimar - - - - - -		1,417	212,000	156
Saxe Meinengen - - - -		988	130,000	131
Saxe Altenburg - - - -		689	104,000	150
Saxe Coburg Gotha - - - -		965	145,000	150
Rensgreitz - - - - - -		138	23,000	167
Rens Schleitz - - - - - -		206	28,000	136
Rens Lowenstein Eberad'f - -		237	23,000	94
Schwartzburg Sonderhausen - -		352	48,000	133
Schwartzburg Rudolstadt - - -		367	65,000	
Anhalt Dassau - - - - - -		345	56,000	162
Anhalt Bernbourg - - - -		330	38,000	115
Anhalt Koethen - - - -		313	34,000	107
Brunswick - - - - - -		1,494	242,000	162
Lippe Detmold - - - - - -		437	72,000	164
Lippe Schaumbourg - - - -		207	26,000	120
Waldeck - - - - - - -		460	54,000	117
Mecklenburg Schwerin - - -		4,757	431,000	90
Mecklenburg Strelitz - - -		766	77,000	100
Holstein Oldenburg - - - -		2,497	240,000	96
Lubeck - - - - -	Imperial cities.	115	41,000	356
Hamburg - - - - -		146	148,000	1,000
Bremen - - - - -		61	49,000	800
Frankfort on Main - - -		84	52,000	620
Saxony, Kingdom - - - - -		5,770	1,400,000	240
Hanover, do - - - -		14,800	1,550,000	104
		74,235	13,577,000	182

No. 2.—*Tabular View of those Provinces of Germany which have been from time to time annexed to the adjacent great monarchies, but which in themselves remain essentially, nationally considered, German.*

	Area in English square miles.	Population.	Popul'n to the sq. mile.
DENMARK.			
Duchy of Holstein and Duchy of Lauenburg	3,200	410,000 40,000	140
PRUSSIA.			
Brandenburg	50,000	1,500,000	143
Pomerania		845,000	
Saxony, province of		1,400,000	
Westphalia		1,230,000	
Juliers, Cleves, and Berg		1,060,000	
Lower Rhine, province of		1,120,000	
AUSTRIA.			
Bohemia, Kingdom of	15,243	4,001,852	260
Duchy of Tyrol	8,285	827,635	100
Moravia and Upper Silesia	7,731	2,110,141	270
Duchy of Styria	6,541	923,982	140
Carinthia and Carniola	5,936	743,217	125
Austria, Upper	11,350	2,190,634	190
Austria, Lower, and			
Saltzburg			
Total	137,086	18,402,461	134

NOTE.—Combining the results of both tables, the area of ethnographical Germany comes out 211,321 square English miles; and the aggregate population to a comparatively unimportant fraction of 33,000,000, with a distributive population of 182 to the English square mile.

The numbers in these tables are not given as minutely correct, which degree of perfection the original authors of the document do not claim. The element was derived from the geography of Larenaudiere, &c., and the tables of Black's Edinburgh Atlas.

WILLIAM DARBY.

THE PUBLISHING BUSINESS.

Pictorial Histories, &c. We are indebted to the courtesy of Messrs. Sorin & Ball, publishers, Philadelphia, for a copy of the Pictorial Histories of Greece, of England, of France, and of the United States, each in a handsome volume, by S. G. Goodrich, author of Peter Parley, &c. These books are designed for schools, and we are glad to hear of their extensive circulation.

Messrs. S. & B. have also laid upon our table, thirteen volumes of Dr. Reese's edition of Chambers Educatorial course, illustrated with a variety of engravings. The publishers are doing much good, for the rising generation especially, by reproducing such works,—the very best for schools as well as for private instruction, in all the useful branches of knowledge. The volumes range in the following order:

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☞The Messrs. Apppleton, of New York and Philadelphia, have sent us through J. B. Steel Esq., 14 Camp street, some half dozen volumes which we commend to students of Greek and Latin.

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In behalf of the Messrs Appleton it may be said, that they not only issue works of acknowledged merit, but their style of execution is unsurpassed by any other press.

From these gentlemen, through Mr. Steel, we have also received Ollendorff's New Method of learning to read, write and speak Spanish. We believe it will fully answer the purpose, and therefore recommend it to the diligent learner.

Also a handsome volume by John Ratcliffe Chapman, Civil Engineer, on the use of the improved American Rifle, with practical advice to Young Marksmen.

Mr. J. B. Steel, 14 Camp street, have laid upon our table,

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☞We thank the Hon. Henry Johnson, of the U. S. Senate, for a copy of the interesting Report of the Secretary of War, in relation to the commerce, navigation, and means of defence of the western lakes and rivers.

☞The March No. of that sterling monthly, "The Farmers Library," edited by J. S. Skinner, New York, has been received.

Romance of the History of Louisiana, By Charles Gayarre.

Our friend the Author, has submitted the proof sheets of this interesting work for our inspection and we have had much delight in its perusal. The subjects treated are full of novel interest and are presented with a lively and graphic pen We could select many passages of high eloquence and finish. The sketchings of character are life-like and it is not difficult to fancy the men themselves before us. In the catagory may be mentioned "Maurepas," "Ponchartrain," "Cadillac," "Crozot" &c. The authors forte is evidently in such delineations. The style of the production is in general well sustained, though, an accasional instance could be shown of too sudden rise and fall.

Mr. Gayarre tells us that his object was simply amusement, and that he has not aimed at any historical truth further than that it may furnish the ground work for embellishment—nor must we suppose this "embellishment" *always* resting upon such a foundation.

Some of the northern papers have spoken of the "*Romance of Louisiana*" in the highest terms from the few sheets they have seen, and we agree with them in predicting a large degree of popularity for it. Should this be the case, the author promises a continuation of the subject, which it may be said he has in the present volume but barely touched.

So soon as the work is regularly issued from the press we shall endeavor to give it a critical examination, and as we were first to bring a part of it before the public we may give some elaborate quotations.

Second Municipality Library.

We are indebted to the Board of Directors for a copy of their new Catalogue—a neat volume of 150 pages, and are gratified with the exhibition it makes of valuable works, to be found upon the shelves of the library. The volumes are arranged under appropriate heads, as "Religion," "History," "Sciences," and "Arts," &c. An alphabetical list of authors' names is appended.

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2. *The London Quarterly,* Is the Tory organ of resistance and defence, and followed the Edinburgh. It is now edited by Lockhart, and its chief contributors have been Southey, Scott, Lockhart, Apperley, Ferguson, Wordsworth, Lord Mahor, Dr. Milman &c.

3 *The Westminster Review,* was established by the ultra liberals of the House of Commons, and presided over for a long time by Jeremy Bentham. It asserts boldly popular rights as against all systems of oppression, and has been blended with the *Foreign Quarterly* whose object was to diffuse throughout England, the beauties and excellencies of the Literature of all Europe. In this point of view the publication is invaluable.

4. *Blackwood's Magazine.* It is scarcely necessary to comment on this most familiar and spirited production, presided over with so much ability by Professor Wilson. Though rank tory in its character, it is said to maintain a circulation

of 40,000 copies in Great Britain, being altogether unequalled. In the United States notwithstanding the unpalatable complexion of its politics, the circulation is in the same proportion.

5. *The North British Review:* we quote from its prospectus. The great ecclesiastical movement in Scotland led to its establishment. There was no JOURNAL in the UNITED KINGDOM, which appeared to meet the necessities of this Anti-National-Church agitaiton. Indeed, the revolution caused by the disruption induced a new state of things, placing the actors in new positions of observation: nor could they give utterance to their new perceptions of State and Church Polity—their new sympathies—their new emotions, without some other organ of thought than any then extant. Hence the spontaneous agreement of the great master minds among them, in the necessity of a new outlet of opinion, and the immediate creation of the NORTH BRITISH REVIEW.

This Periodical is not ultra in its views on any one of the grand departments of human knowledge: at the same time it never drifts from its moorings on the shores of the pure Evangelical religion of the Bible. Nor will it fail to compare most favorably with every other contemporary in the amount of talent, energy and spirit, enlisted on its side. The names of Sir David Brewster, Dr. Chalmers, Cunningham, Lorrimer, Candlish, Gordon, Buchanan, Smith, &c., are a host in themselves. Much foreign talent is also pledged to adorn and enrich its pages.

All of these works are to be had of J. C. Morgan, Exchange Place, New Orleans.

MORAL COURAGE: *an address before the Alumni of the College of Charleston,* BY M. R. MIDDLETON, *a member, Charleston,* 1848.

There is a light moral tone and religious sentiment pervading this address, characteristics by no means common in our times; and what is also remarkable, sound, practical sense and judgment have been preferred to oratorical flourish, tinsel, and declamation! It is so easy to frame an oration of the latter kind, so difficult of the former.

If possible we would have been present at this celebration of our venerable and good *alma mater* and shared in the conviviliaties of the occasion. We yet hope this *exile* is not *forever*. How cherished are the associations which crowd around and the pell which binds us when memory runs back to that bright past and brings it all up again, beautiful and fresh and hopeful! Alas those familiar faces and those familiar scenes, those hours of boyhood, those buoyant dreams of adolescent manhood—our frolics and our foibles; the daily professor, the weekly debate, the stirring commencement, the vacation and re-union agaia—gone, gone, are ye all!

> "I may not pause—I must not dream
> Too beautiful these visions seem!"

There is not of all that class of 1848 with whom we went hand and hand *through* college and *out* of it, that we could find it in our heart not to love. A fine net work of sympathy binds us to them and binds forever. We remember the solemn parting and the affectionate farewell when that once joyous brotherhood dispersed itself *forever*. We scarce can learn how these elements have been distributed? What new connexions and sympathies and associations they have formed and whether cordial or wormwood has tinctured the cup for them? One we know has been taken already to heaven. He was gentle and innocent and good in all his walks. Our seats were side by side and we loved the simplicity of a character which found glee and merriment in every scene and diffused it spite of all opposition around. He had no enemy for what heart could be so malignant? On a foreign soil, with the armour of a soldier on him and in the service of his country, our early friend was taken home. Tears of friendship and affection have bedewed the grave, in that strange land and start to our eyes even now in memory, of *Samuel Henry Dickson*. But we have wandered among the tempting flowers and lights of other days too long for the demand of the busy present, Alas! Alas!

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